No. 15-680

IN THE

Supreme Court of the United States

GOLDEN BETHUNE-HILL, CHRISTA BROOKS, CHAUNCEY Brown, Atoy Carrington, Davinda Davis, Alfreda GORDON, CHERRELLE HURT, THOMAS CALHOUN, TAVARRIS SPINKS, MATTIE MAE URQUHART, VIVIAN WILLIAMSON, AND SHEPPARD ROLAND WINSTON,

Appellants,

v.

VIRGINIA STATE BOARD OF ELECTIONS, ET AL.,

Appellees.

On Appeal from the United States District Court for the Eastern District of Virginia

JOINT APPENDIX **VOLUME VI**

MARC E. ELIAS PAUL D. CLEMENT Counsel of Record Counsel of Record BRUCE V. SPIVA ERIN E. MURPHY ARIA C. BRANCH MICHAEL D. LIEBERMAN PERKINS COIE LLP BANCROFT PLLC

700 Thirteenth Street, N.W. 500 New Jersey Avenue, NW Suite 600

Seventh Floor

Washington, D.C. 20005 Washington, DC 20001

(202) 654-6200 (202) 234-0090

MElias@perkinscoie.com pclement@bancroftpllc.com

Counsel for Appellants Counsel for Intervenor-Appellees

[Additional Counsel Listed On Inside Cover]

JURISDICTIONAL STATEMENT FILED NOVEMBER 20, 2015 **REVIEW GRANTED JUNE 6, 2016**

KEVIN J. HAMILTON ABHA KHANNA RYAN SPEAR WILLIAM B. STAFFORD PERKINS COIE LLP 1201 Third Avenue Suite 4900 Seattle, WA 98101-3099 (206) 359-8000

Counsel for Appellants

EFREM M. BRADEN
KATHERINE L. MCKNIGHT
RICHARD B. RAILE
BAKER & HOSTETLER LLP
1050 Connecticut Avenue, NW
Suite 1100
Washington, DC 20036
(202) 861-1504
mbraden@bakerlaw.com

Counsel for Intervenor-Appellees

DALTON LAMAR OLDHAM, JR.
DALTON L. OLDHAM LLC
1119 Susan Street
Columbia, SC 29210
(803) 237-0886
dloesq@aol.com

Counsel for Intervenor-Appellees

STUART A. RAPHAEL
Counsel of Record
SOLICITOR GENERAL OF VIRGINIA
900 East Main Street
Richmond, VA 23219
(804) 786-7240
sraphael@oag.state.va.us

Counsel for Defendant-Appellees

TABLE OF CONTENTS

VOLUME I	Page
Opening Statement of Hon. Mark L. Cole, Chairman, Committee on Privileges and Elections, before Subcommittee on Redistricting, Virginia House of Delegates (Sept. 8, 2010)	1
Email from Chris Marston to Katie Alexander Murray re RPV Leadership Roster (Dec. 9, 2010)	5
Federal Register Notice – Dept. of Justice Guidance Concerning Redistricting Under Section 5 of the Voting Rights Act, 76 Fed. Reg. 7470 (Feb. 9, 2011)	8
Email from Kent Stigall to Chris Jones re District demographics, with attachments (March 9, 2011)	22
Email from James Massie to Mike Wade re Help with Contested Election Information, with attachments (March 10, 2011)	33
Email from Chris Marston to Cortland Putbreses re Help with Contested Election Information, with attachments (March 11, 2011)	35
House Committee on Privileges and Elections - Committee Resolution No. 1 -House of Delegates District Criteria (Proposed by Del. S. Chris Jones) (March 25, 2011)	36
Email from G. Paul Nardo to Caucus Members re Messaging on House Redistricting Maps, with attachments	
(March 29, 2011)	39

ii TABLE OF CONTENTS—Continued

	Page
Email from Chris Marston to Chris Jones re HD61-HD75 Dale's Options, with attachments (April 1, 2011)	42
The Public Interest in Redistricting, Report of the Independent Bipartisan Advisory Commission on Redistricting, Common- wealth of Virginia (April 1, 2011)	43
Email from Chris Marston to Paul Haughton re FYI, with attachment (April 2, 2011)	115
Public Hearing: Virginia House of Delegates, Subcommittee on Redistricting, Chaired by Del. Chris Jones – Danville, Va. (April 2, 2011)	117
Email compilation among Chris Jones, Chris Marston, G. Paul Nardo, Jennifer McClellan, Kent Stigell, Kirk Showalter, Lawrence Haake, Mark Cole, and William Howell re HB5001 as Passed Senate; Status Update - House Redistricting; Redistricting fix; and, Redistricting plan comments (April 4-8, 2011)	138
Public Hearing: Virginia House of Delegates, Committee on Privileges and Elections, Subcommittee on Redistricting— Richmond, VA. (April 4, 2011)	157
Transcript: 2011 Special Session I, Virginia House of Delegates, Redistricting Floor Debates (April 4, 2011)	190
I A A B C I A A A A A A A A A A A A A A A A A A	1./\/

iii TABLE OF CONTENTS—Continued

	Page
Transcript: 2011 Special Session I, Virginia House of Delegates, Redistricting Floor Debates (April 5, 2011)	
Transcript: 2011 Special Session I, Virginia House of Delegates, Redistricting Floor Debates (April 27, 2011)	
Video: 2011 Special Session I, Virginia House of Delegates, Redistricting Floor Debates (April 4, 2011) (Part 1 of 2)	
Video: 2011 Special Session I, Virginia House of Delegates, Redistricting Floor Debates (April 4, 2011) (Part 2 of 2)	n/a
Video: 2011 Special Session I, Virginia House of Delegates, Redistricting Floor Debates (April 5, 2011)	
Video: 2011 Special Session I, Virginia House of Delegates, Redistricting Floor Debates (April 27, 2011)	
VOLUME II	
Chapter 1 of the Acts of Assembly (2011 Special Session 1), Statement of Change (2011)	
Chapter 1 of the Acts of Assembly (2011 Special Session 1), Statement of Anticipated Minority Impact (2011)	•
Table: HB 5005 Passed 4/28/11. House Plan – Population Totals	

iv TABLE OF CONTENTS—Continued

	Page
gislative History of 2011 Virginia General Assembly Redistricting Plan (May 4, 2011)	589
gislative History of 2012 Virginia Congressional District Plan (Jan. 26, 2012)	603
pert Report of Stephen Ansolabehere (March 11, 2015)	612
ply Report of Stephen Ansolabehere (April 24, 2015)	704
port of John B. Morgan Regarding Plaintiffs' Alternative Plan and the Enacted Plan (<i>Page v. State Board of Elections</i>) (March 14, 2014)	740
S5001- Committee Substitute, Chart: Political Subdivisions Split between Districts Reports (April 9, 2011)	774
orkspace: House Plans>>U of R Revised Plan (April 4, 2011)	794
B 5002 University of Richmond House Plans, Tables: Population Totals, Racial Demographics, Voting Age, and Election Data (April 4, 2011)	835
ble: HB 5003 Plan (April 1, 2011)	844
3 5003 J. Morrissey, Tables: Population Totals, Racial Demographics, Voting Age Population, and Election Data (April 18, 2011)	201
re Constituencies Report (March 23, 2015)	883 892
10 Collection of the point (martin 20, 2010)	004

$\begin{tabular}{ll} v \\ TABLE OF CONTENTS—Continued \\ \end{tabular}$

	Page
Workspace: House Plans>>HB5005 Copy 1 Plan (4/18/2011), Table: Measures of Compactness	915
Table: Precinct Population / Voting Data	919
Compilation of Maps: (1) HB 5005 Passed 4/28/11, House Plan; (2) Percentage of Total Population that are Black by Precinct; (3) Percentage of Voting Age Population that are Black by Precinct (April 28 – May 3, 2011)	929
Compilation of Enacted District Maps (including Districts 63, 69, 70, 71, 74, 75, 77, 80, 89, 90, 92, 95)	932
Compilation of Enacted BVAP Maps (including Districts 63, 69, 70, 71, 74, 75, 77, 80, 89, 90, 92, 95)	938
Public Hearing, Virginia Senate, Committee on Privileges and Elections, Subcommittee on Redistricting, Portsmouth, VA (Dec. 2, 2010)	945
House of Delegates Vote Tally: HB 5001 (April 5, 2011)	991
Transcript: 2011 Special Session I, Virginia House of Delegates, Redistricting Floor Debates (April 6, 2011)	993
House of Delegates Vote Tally: HB 5001 (April 6, 2011)	1018
Transcript: 2011 Special Session I Virginia House of Delegates Redistricting Floor Debates (April 25, 2011)	1020
Devates (April 20, 2011)	1040

vi

TABLE OF CONTENTS—Continued

VOLUME III	Page
House of Delegates Vote Tally: HB 5005 (April 7, 2011) [NOTE: log says 4/27/2011]	1046
House of Delegates Vote Tally: HB 5005 (April 28, 2011)	1048
Governor's Veto: HB 5001 (April 15, 2011)	1050
Division of Legislative Services Summary of Legislative Activity: HB 5001 (March 19, 2015)	1054
Division of Legislative Services Summary of Legislative Activity: HB 5005 (March 19, 2015)	1058
Declaration of Thomas Brooks Hefeller, Ph. D. (April 10, 2015)	1061
Declaration of M.V. (Trey) Hood III (April 10, 2015)	1151
Expert Report of Jonathan N. Katz (April 10, 2015)	1203
House Committee on Privileges and Elections Committee Resolution No. 1 (April 3, 2001)	1248
U.S. Census Bureau News: U.S. Census Bureau Delivers Virginia's 2010 Census Population Totals, Including First Look at Race and Hispanic Origin Data for Legislative Redistricting (Feb. 3, 2011)	1251
Current House of Delegates Districts Tables: District Population Summary, Demographic Population Totals, and Voting Age Population Totals (March. 8, 2011)	1257
i upulatiuli Tutais (Martil 0, 2011)	140 l

vii TABLE OF CONTENTS—Continued

	Page
HB 5005, House Plan Tables: Population Totals, Racial Demographics, Voting Age Population, and Election Data (March. 12, 2013)	1264
Maptitude Standardized Report: Population by District for HB 5005 as Enacted (April 9, 2015)	1275
Maptitude Standardized Report: Population Summary by District for Current 2010 (April 9, 2015)	1278
Maptitude Standardized Report: Population Summary by District for HB 5001 as Introduced by Delegate Chris Jones (April 9, 2015)	1281
Maptitude Standardized Report: Population Summary by District for HB 5001 House Substitute (April 9, 2015)	1284
Maptitude Standardized Report: Population Summary by District for HB 5001 Senate Substitute (April 9, 2015)	1287
Maptitude Standardized Report: Population Summary by District for HB 5001 as Passed Senate (April 9, 2015)	1290
Maptitude Standardized Report: Population Summary by District for HB 5002 (April 9, 2015)	1293
Maptitude Standardized Report: Population Summary by District for HB 5003 (April 9, 2015)	1296

viii TABLE OF CONTENTS—Continued

	Page
Maptitude Standardized Report: Population Summary by District for HB 5005 as Introduced by Del. Jones (April 9, 2015)	1299
Maptitude Standardized Report: Population Summary by District for HB 5001 Conference (April 9, 2015)	1302
Maptitude Standardized Report: Population Summary by District for HB 5005 Senate Substitute (April 9, 2015)	1305
VOLUME IV	
Maptitude Standardized Report: Incumbent Pairings for HB 5002 (March 17, 2015)	1308
Maptitude Standardized Report: Incumbent Pairings for HB 5003 (March 17, 2015)	1312
Benchmark Plan: Black VAP Percentages as reported by DLS and as calculated by DOJ Guidelines	1316
Enacted Plan: Black VAP Percentages as reported by DLS and as calculated by DOJ Guidelines	1319
Map of Virginia Counties	1322
Virginia – 2010 Census Results: Total Population by County	1323
Virginia – 2010 Census Results: Percent Change in Population by County, 2000 to 2010	1324
Virginia 2010 Census Results: Percent Change in Population by House District, 2000 to 2010	1325
	1020

ix TABLE OF CONTENTS—Continued

	Page
Virginia Counties and Independent Cities	1326
Richmond Area—2011 Plan: Racial and Political Demographics	1338
2001 House Districts 2010 Deviations – Southeastern Virginia	1339
2001 House Districts 2010 Deviations – Northern Virginia	1340
2001 House Districts 2010 Deviations – Norfolk Area Virginia	1341
2001 House Districts 2010 Deviations – Richmond Area Virginia	1342
2011 House District 79 – Showing Water Crossing Between Portions of District	1343
2011 House District 90 – Showing Water Crossing Between Portions of District	1344
2001 House Districts 2010 Deviations – Norfolk Area Virginia	1345
2001 House Districts 2010 Deviations – Deviations Hampton-Newport w Pcts	1346
2001 House Districts 2010 Deviations – Deviations Richmond Area w Pcts	1347
2001 House Districts 2010 Deviations – Deviations Fairfax Arlington Alexandria	1040
Area w Pcts.	1348
2011 House District 77 – Showing Water Crossing Between Portions of District	1349

$\begin{tabular}{ll} x \\ TABLE OF CONTENTS—Continued \\ \end{tabular}$

	Page
2011 House District 80 – Showing Water Crossing Between Portions of District	1350
2011 House District 83 – Showing Water Crossing Between Portions of District	1351
2011 House District 94 – Showing Water Crossing Between Portions of District	1352
2011 House District 76 – Showing Water Crossing Between Portions of District	1353
Map: The Original Gerrymander	1354
Map: The Original Gerrymander – Without Water and Islands	1355
Table: The Original Gerrymander, Measures of Compactness (June 19, 2015)	1356
Table: The Original Gerrymander – Without Water and Islands, Measures of Compactness (June 19, 2015)	1357
Table: 2001 House Plan Deviations, Norfolk Area	1358
Table: 2011 House Plan, Districts Not Connected by Road with Water or River Crossings	1359
Table: 2011 House of Delegates Plan, Combined Compactness Score	1360
Table: State of Virginia – 1991 House of Delegates Plan, Districts with Minor River Crossing without Roads	1363
District Maps for the Benchmark Plan (2010) and the Enacted Plan (2011)	1364

xi TABLE OF CONTENTS—Continued

	Page
Maps Showing Multi-Year Political/Racial Data for Districts: 63, 69, 70, 71, 74, 75, 77, 80, 89, 90, 92, and 95	1481
Collection of Data: Virginia Department of Elections, Elections Results 2000-2015	1493
Maps of Challenged Districts – Old HDs & Enacted HDs (HB 5005) for Districts 63, 69, 70, 71, 74, 75, 77, 80, 89, 90, 92, and 95	
	1557
Maps of HDs 27, 62, 69, 70, 71 – Vetoed (HB 5001 Conf. Report) & Enacted HDs (HB 5005)	1564
,	
Maps of Districts by Region – 2001 Plan	1567
Maps of Districts by Region – 2011 Plan	1569
Contrasting Silhouette Maps of Districts 5, 13, 17, 20, 22, 35, 48, and 96 for Year 2001 and 2011 Plan	1571
Map of Statewide Deviation for Change in Seats, Population 2010	1579
$\overline{ m VOLUME\ V}$	
Transcript –Bethune-Hill Bench Trial (July 7, 2015) (Day 1)	1580
Opening Statement:	
Plaintiffs Defendant Intervenors	1583 1590
Testimony of Jennifer Leigh McClellan Direct Examination	1598 1598 1625

xii TABLE OF CONTENTS—Continued

	Page
Testimony of Rosalyn Dance Direct Examination Cross Examination	1633 1633 1650
Testimony of Ward L. Armstrong Direct Examination	1654 1654 1669 1681 1683
Testimony of Stephen D. Ansolabehere Direct Examination	1684 1684 1760
Transcript –Bethune-Hill Bench Trial (July 8, 2015) (Day 2)	1780
Testimony of Stephen D. Ansolabehere Cross Examination	1782 1782 1796
Testimony of Steven Christopher Jones Direct Examination	1802 1803 1913
<u>VOLUME VI</u>	
Transcript –Bethune-Hill Bench Trial (July 9, 2015) (Day 3)	1951
Testimony of Steven Christopher Jones Cross Examination	1954 1954 1995
Testimony of Jonathan Neil Katz Direct Examination Cross Examination Redirect Examination	2006 2006 2043 2088

xiii TABLE OF CONTENTS—Continued

	Page
Testimony of M.V. (Trey) Hood, III	2090 2090 2132 2145
Testimony of Gerald Herbert Direct Examination	2149 2149
Transcript –Bethune-Hill Bench Trial (July 13, 2015) (Day 4)	2156
Testimony of Thomas Hofeller Direct Examination Cross Examination Redirect Examination	2158 2159 2199 2207
Testimony of Stephen D. Ansolabehere Direct Examination	2214 2214 2264 2270
Closing Arguments: Plaintiffs Defendant Intervenors	2273 2282
Members of the Court Final Questions	2288

[434] IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA RICHMOND DIVISION

Civil Action No. 3:14CV852

GOLDEN BETHUNE-HILL, et al., vs.

VIRGINIA STATE BOARD OF ELECTIONS, et al.

July 9, 2015

COMPLETE TRANSCRIPT OF THE BENCH TRIAL

HEARD BEFORE:

THE HONORABLE ROBERT E. PAYNE THE HONORABLE GERALD BRUCE LEE THE HONORABLE BARBARA M. KEENAN

APPEARANCES:

Kevin J. Hamilton, Esquire Perkins Coie, LLP 1201 Third Avenue Suite 4800 Seattle, Washington 98010

Bruce V. Spiva, Esquire Aria C. Branch, Esquire 700 13th Street NW Suite 600 Washington, D.C. 20005 Counsel for the plaintiffs

Peppy Peterson, RPR Official Court Reporter United States District Court

[435] APPEARANCES: (cont'g)

Tony F. Troy, Esquire Eckert Seamans Cherin & Mellott, LLP 707 East Main Street Suite 1450 Richmond, Virginia 23219

Daniel A. Glass, Esquire Eckert Seamans Cherin & Mellott, LLC 1717 Pennsylvania Avenue, NW Suite 1200 Washington, D.C. 20006

Godfrey T. Pinn, Jr., Esquire Harrell & Chambliss, LLP 707 East Main Street Suite 1000 Richmond, Virginia 23219 Counsel for the Virginia State Board of Elections

E. Mark Braden, Esquire Katherine L. McKnight, Esquire Jennifer M. Walrath, Esquire Richard B. Raile, Esquire Baker & Hostetler, LLP 1050 Connecticut Avenue, NW Suite 1100 Washington, D.C. 20036

Dalton L. Oldham, Jr., Esquire Dalton L. Oldham, LLC 1119 Susan Street Columbia, South Carolina 29210 Counsel for Virginia House of Delegates

1953 [436] PROCEEDINGS

THE CLERK: 3:14CV852, Golden Bethune-Hill, et al., versus Virginia State Board of Elections, et al., versus Virginia House of Delegates.

JUDGE LEE: Good morning, counsel. Good morning, Delegate Jones.

JUDGE PAYNE: Good morning.

MR. HAMILTON: Your Honors, good morning. I wanted to bring to the Court's attention two items: Number one, there was a docket entry last night referencing the stipulation, the factual stipulation of the parties, and I believe the clerk made an error. The correct docket number is 83, not 80, and that's, no doubt, due to my fault because I misspoke when I first said 80 and then corrected it to 83. So the correct docket entry should be docket 83, and I just wanted to correct that for the record.

JUDGE PAYNE: Thank you, Mr. Hamilton.

MR. HAMILTON: And then second, I neglected to point out to the Court and bring to the Court's attention the previously submitted deposition designations filed by both parties. It's been previously filed. That's docket entry number 90, and that, of course, is part of our case.

JUDGE PAYNE: You mean as part of your case.

[437] MR. HAMILTON: Yes.

JUDGE PAYNE: All right. I guess technically we'll reopen the case and allow those entries in. You have no objection, Mr. Braden? I take it you knew they were coming.

MR. BRADEN: I have no objection, Your Honor.

JUDGE PAYNE: All right, they're part of the case, and thank you very much, Mr. Hamilton, for catching that. Sometimes in the heat of these things, we overlook a few things. No harm, no foul.

MR. HAMILTON: Thank you, Your Honor.

JUDGE PAYNE: Mr. Spiva, are you going to pick up?

MR. SPIVA: Yes, Your Honor, thank you.

JUDGE PAYNE: Delegate Jones, I remind you, you are under the same oath you took yesterday.

MR. JONES: Yes, sir.

STEVEN C. JONES,

a witness, called at the instance of the defendant, having been previously duly sworn, testified as follows:

CROSS-EXAMINATION

BY MR. SPIVA: (resuming)

Q Good morning, Delegate Jones. How are you doing?

[438] A Great. Good morning to you.

- Q Thank you. I think yesterday when we stopped, Delegate Jones, we were looking at Plaintiffs' Exhibit 35. Do you still have that notebook in front of you?
 - A Yes, sir.
 - Q Could you turn to Plaintiffs' Exhibit 35, please.
 - A I'm there.
- Q And if you could turn to page 72, I'd appreciate it.

MR. SPIVA: Your Honors, would it be all right if we put a demonstrative exhibit? It was one we've used previously.

JUDGE PAYNE: Sure. No objection, Mr. Braden? You know what it is?

MR. BRADEN: Actually, I do object to that, Your Honor. I have no problem with everything below the top line, but on the 55 percent rule, it does not seem to be -

JUDGE PAYNE: You mean the caption?

MR. BRADEN: The caption is incorrect.

JUDGE PAYNE: Take it down if he's objected to it unless you want to cover up the caption.

MR. SPIVA: That's fine, Your Honor.

JUDGE PAYNE: All right. I think he's right. That's your argument, and he's got a different position. We can't go both ways.

[439] MR. SPIVA: Understood.

JUDGE PAYNE: Take that off the slide, please. Thank you.

Q So, Delegate Jones, if I could turn your attention to page 72 of Exhibit 35, starting at line five, Delegate Armstrong asks you a question. He says, "So the gentleman has stated that in his opinion nothing below a 55 percent minority-majority district would be sufficient for the minority community to elect its candidate of choice?"

Delegate Armstrong asked you that question; correct?

A That is correct.

Q And in the next line, starting line ten, you answer, "I'm not sure he was listening closely. I said it's my opinion from the testimony that was received during our public hearings that the community felt that they needed a percentage of 55 percent or better. That was my response to the gentleman."

And that was your response and statement on the floor of the House; is that correct?

A That is correct.

Q Okay. Let me ask you to turn in the same exhibit, Plaintiffs' Exhibit 35, to page 107, and I'm going to start with the statement of yours on line 16, Mr. Jones. It says, "Mr. Speaker, I must admit to the gentleman – I told my wife I wouldn't use any versus from songs, so I [440] won't. I'm a little dazed and confused. I'm looking here at the – what I have for the commission plan, option one, and I have a high percentage of black voting-age population of 56.8 and a low of 52.7.

"Now, I can tell the gentleman in House Bill 5001 that is substituted before this body, we – every single, solitary district majority-minority is over 55 percent. Now, I know I wasn't that good at math. I'm not a math major, but from my reading of this and my double-checking it, that's what I have.

"So maybe we just have – you know, numbers can say different things to different people, and I can stand to be corrected based upon what I've had available to me throughout this process and I have – and I am a detail person. I double-check it twice. You know, I'm not a very good carpenter, so I always measure three times before I cut one time.

"So I'm looking at it, and I do not agree with that statement. As a matter of fact, the average black voting-age population is 54.4 percent in the 12 plan from the commission."

That was also your statement in the floor of the House; isn't that right?

- A That is correct, and I was speaking in reference to the 55 percent that was the DLS which rounded to greater [441] than 100 percent.
- Q Okay, fair enough, but you didn't say in that statement that you there was this different calculation, that there was a DOJ black calculation that was less than 55 percent, did you?
- A No, I did not, but I did know that the method I introduced had three districts that were below the 55 percent.
- Q But you didn't note that in the statement in the House, did you –
- JUDGE PAYNE: Mr. Spiva, we can read and understand what he did not say. There's no need to ask him what he didn't say. You can make that in your argument, but you don't need to take up time doing that.
- Q Let me ask you to turn to page 113 of the same exhibit. It's starting on line one. Delegate Morrissey asks you a question. He says, "Given that the gentleman then studied the plan, I would ask him, does he distinguish as there being a difference between a 55 percent BVAP versus 53 BVAP," and you say, "Mr. Speaker," and Delegate Morrissey continues, "That is, does the gentleman consider that a significant and meaningful difference," and you respond, "Mr. Speaker, I would say based on the

testimony that we have, that we heard during the process, I would say yes, based on the testimony from [442] the community."

Is that – that was your response to Mr. Morrissey on the floor of the House?

- A Yes. That was based on testimony from the community and also just election returns that in elections that I had observed over the years.
- Q And let me ask you, you've mentioned testimony from the community. Are you referring to the community meetings that you held around the state at as part of the redistricting process? You had testified, I think, about that yesterday, that there were these community meetings that you held, public meetings?
- A That and from the members of the black caucus, yes.
- Q Okay. But in terms of input from the community, you are primarily talking about these public hearings that you had?
 - A And the black caucus, yes, sir.
- Q So if we scour the transcripts of those hearings, those public documents, isn't it fair to say that we won't find one reference to the need for a 55 percent or greater BVAP in the 12 challenged districts?
- A I did not read I did not attend every public hearing. I did not read the transcripts from every one of those public hearings.
- Q Do you recall a specific instance of a community [443] member coming into one of these public hearings and saying that their district, one of these challenged districts needed to have a 55 percent or greater BVAP?

- A No, I don't, but I do recall the black members of the black caucus telling me that they felt they needed north of 55 percent based on some personal experience by the black caucus members, and other elections that had occurred in districts that they currently finally won by being a Caucasian.
- Q Understood, but my question was directed specifically to community members. Let me shift for a minute, and I'd like to have you turn to a different exhibit, if you will. It's Plaintiffs' Exhibit 48 in your book.
 - A I don't have 48 in my book.

JUDGE PAYNE: He's getting you a book. While he's looking at that, are you through with this volume for awhile?

MR. SPIVA: Yes, Your Honor.

- Q Delegate Jones, I can, if you need this, I can direct you to another exhibit which will demonstrate that this is part of the 2011 preclearance submission to the DOJ from the Commonwealth, but do you recognize it as such?
- A I recognize it as a submission. I did not read it. That would have been done by the Attorney General's Office working with Legislative Services. My job would have been [444] officially done as a patron of the bill.
- Q I see. But it was prepared in order to try to obtain preclearance for the plan?
- A It was required it was prepared as required by law, yes, sir.
- Q Right. And presumably the idea was to encourage DOJ to preclear the plan.
 - A I think that's self-evident.

- Q And I assume that the House tried to provide DLS and DLS provided DOJ accurate information?
- A I would say the House didn't provide anything. We work with the Division of Legislative Services on a bill. The bill has to go through enrolling drafting first, and then it goes to the process of being approved, signed by the president of the Senate, signed by the speaker of the House, goes to the governor for signature, and then is enrolled. The House members have nothing to do with that part of the enrollment. Then it becomes law.
- Q Fair enough, but this is the submission that was done on behalf of the Commonwealth to try to get the plan pre-cleared. Why don't I turn your attention to page 11 of this document, which I should have mentioned for the record is titled "Legislative History of 2011 Virginia and General Assembly Redistricting Plans." It's attachment 17 to the preclearance submission, and let me just turn [445] your –

JUDGE LEE: I'm sorry. Did he say that he wrote this?

MR. SPIVA: He did not write it. This was an official document that was submitted to the DOJ for the preclearance.

JUDGE LEE: I thought I heard him say that the Attorney General prepared this. Is that right?

THE WITNESS: They did – I'm sorry. If I may – in conjunction with Division of Legislative Services working with the Attorney General. They then file to the Department of Justice, and I believe they also simultaneously file with the district court.

JUDGE LEE: So is this your document?

THE WITNESS: No, it's not my document. It belongs to the House. It's a, quote unquote – when a bill is enrolled and then it becomes law, this document was prepared because of the requirement for preclearance with the Department of Justice.

JUDGE LEE: Go ahead.

JUDGE PAYNE: Have you read it before today?

THE WITNESS: No, sir.

Q I just want to turn your attention to one sentence that is in the document that was prepared by DLS and the Attorney General. In the second full paragraph, the [446] paragraph that begins "As outlined in attachment five," and a few lines down you'll see all –

JUDGE LEE: Page 11? Are you referring to page 11? MR. SPIVA: Yes, sir. Yes, Your Honor.

Q And then second full paragraph, six lines down you see a sentence that says, "All 12 black majority districts were maintained in chapter one with greater than 55 percent black VAP – a range of 55.2 percent to 60.7 percent."

And so it's fair to say that the Attorney General and DLS submitted, as part of the Commonwealth's submission to the DOJ, a document that affirmed that all 12 black majority districts had a 55 percent BVAP or higher; is that fair?

MR. BRADEN: I object to the form of that question. It isn't fair to ask him a question about a document that, one, he didn't author; two, he's never read before. It seems to me to be the wrong way to phrase that question.

JUDGE PAYNE: Sustained. Objection sustained.

- Q So, Delegate Jones, were you aware that this statement that I just read was made to the DOJ?
- A I would say knowing that they used a population total that exceeded 100 percent based on the documents that they [447] had, that that's what they would have presented. That's not what DOJ would have seen when they put the block assignment file into their computer to run their analysis.

JUDGE PAYNE: I think the question was, were you aware that this statement had been made.

THE WITNESS: No, I was not aware the statement had been made, but I would assume it would have been made.

Q Let me ask you to turn – and I apologize, Your Honors, because I think I do need to go back to the other notebook which is – to Plaintiffs' Exhibit 9 which is in the notebook that everybody was just looking at. Do you have it, Delegate Jones?

A I do.

- Q All right. And you see that the cover of this is from the Federal Register, Wednesday, February 9th, 2011, Department of Justice, and if you flip through to the second page, it says "Guidance Concerning Redistricting Under Section 5 of the Voting Rights Act," and at the top, it's dated Wednesday, February 9th, 2011. I take it you saw this document during the period that you were involved in redistricting in 2011?
 - A I was aware that the document existed, yes.
 - Q And you actually looked at it, didn't you?
- A I can't say that I looked at it. I don't recall. I had attorneys who were assisting me and helping me along [448] the way.

- Q Have you seen it before?
- A I believe that I have. I recall a document that I got, I think the week before. I think it was dealing maybe with the census numbers that were official, and I'm certain that I received this at some point along the way, but I can't say with 100 percent certainty that I read it in that regard. It's only, what, about four pages, I guess, but I can't say that I read it.
 - Q You can't say that you read every line of it?
- A I'm certain I did not read every line. I would have perused it, if anything, to be quite honest with you.
 - Q Okay, but you did receive it?
 - A I received it. I'm certain that I did.
- Q Okay. Thank you. Let me ask you to let me direct your attention, I guess, to the second printed page, so page 7471, page three of the document. That would be a little easier. Look at the bottom, it says page three.

And the right-hand column – there are three columns. The right-hand column, and about, I guess, it's the second full paragraph, it says, um, "In determining whether the ability to elect exists in the benchmark plan and whether it continues in the proposed plan, the Attorney General does not rely on any predetermined or fixed demographic percentages at any point in the assessment."

[449] Were you aware of that guidance by the DOJ in terms of Section 5, that they don't use predetermined or fixed demographic percentages at any point in the assessment?

- A I recall from reading "Drawing the Lines," Mary Spain's document, Legislative Services, that there were certain things you looked to consider, and one would certainly be what the benchmark districts were, but there was no predetermined number that had to be met.
- Q And you were concerned about retrogression in the drawing of the new map; is that correct?
- A I was concerned about compliance with the Voting Rights Act, yes, sir. Voting Rights Act and the constitution.
 - Q And that includes avoiding retrogression?
 - A Absolutely.
- Q And this is the DOJ guidance on that question; is that right?
- A I think partly their guidance. I can't speak to if it's their total guidance.
 - Q Do you know whether it's the guidance or not?
- A No, no. I think there are many things that guide the Voting Rights Act. This is certainly one of them. I would not say it's all of the items that you have to consider when you are doing that.
- Q My question wasn't that. It actually was this: Were [450] you aware that this was the DOJ's guidance on that question, compliance with the Voting Rights Act under Section 5?
 - A That there was a functional analysis required?
- Q No. My question is, were you aware that this was the DOJ's guidance on the question of compliance with the Voting Rights Act, specifically Section 5?

A I was aware that you could not retrogress to give the – I think it's the effective election –

Q I want to make sure -

JUDGE PAYNE: Wait a minute, Mr. Spiva. You all are getting back into the habit of stepping on each other's discussions, and the court reporter can't take both of you. So, Delegate Jones, give Mr. Spiva a chance to finish his question. Mr. Spiva, give Delegate Jones a chance to finish his answer and listen – as John Wayne said, Delegate Jones, listen tight, answer just the question that's been asked. All right, Mr. Spiva, go ahead.

MR. SPIVA: Thank you, Your Honor.

Q So the question, Delegate Jones, is just, were you aware that this was DOJ's guidance concerning compliance with the Voting Rights Act, specifically Section 5?

A I think I said yes a few minutes ago. It was one of the items that they consider, yes.

[451] Q This was the DOJ's guidance on that issue.

- A I said yes, yes, sir.
- Q But you didn't read it?

A I didn't say that. I said that I didn't read this line for line. I indicated that Mary Spain had given us some guidance and documents.

Q Let me just turn your attention to the – continuing that same paragraph, it says, "Rather, in the department's view, this determination requires a functional analysis of the electoral behavior within the particular jurisdiction or election district. As noted above, census data alone may not provide sufficient indicia of electoral behavior to make the requisite

determination. Circumstances, such as differing rates of electoral participation within discrete portions of a population may impact on the ability of voters to elect candidates of choice, even if the overall demographic data show no significant change."

Were you aware that was part of the guidance by the DOJ of what you should consider to determine whether a plan complied with the Voting Rights Act?

- A Yes, I was aware of a functional analysis being required.
- Q And further, in the next paragraph it says, "Although comparison of the census population of districts in the benchmark and proposed plans is the starting point of any [452] Section 5 analysis, additional demographic and election data in the submission is often helpful in making the requisite Section 5 determination," and cites to a regulation.

"For example, census population data may not reflect significant differences in group voting behavior. Therefore, election history and voting patterns within the jurisdiction, voter registration and turnout information, and other similar information are very important to an assessment of the actual effect of redistricting plan."

Were you aware that that was part of the DOJ guidance?

- A Yes, and that was the reason that I spoke directly with all the members of the black caucus.
- Q And, so, you were aware that census population data alone may not reflect significant differences in group voting behavior; correct?
 - A Correct.

- Q You also have to look at election history and voting patterns; is that fair?
 - A Which I did, yes.
- Q Within each district is that something you have to look at within each district?

JUDGE LEE: That's a compound question. Would you ask one question at a time, please.

MR. SPIVA: Sorry.

- [453] Q Is election history within each district something that you have to look at as part of the analysis?
- A I would say what I did was look at the election results and the contested races that you had in primaries for the members of the majority-minority districts, but I cannot say that I did an analysis of voting behavior in each and every 12 districts, no, sir.
- Q It also talks about, the part that I just read, looking at the voter registration and turnout information. Were you aware that looking at voter turnout and registration information within each district was something that was part of the DOJ guidance?
- A I would assume that it was. I was not totally aware of that, but we did have discussions and met with some of the I think very good discussions we had with members of the black caucus and their frustration with Caucasians beating black members in majority districts previously in the Commonwealth.
- Q Let's talk about that. Did you, at any time, compile all of the election results from the challenged districts over the previous ten years?
 - A I did not.

Q Sitting here today, can you tell us the last time a minority-preferred candidate lost an election in challenged District 63?

[454] A I would say that would be in 1991 or 1993, Joe Preston, who actually just served in the House and ran for the Senate seat in the primary against Senator Dance.

Q So it was 1991 or 1993, that was the last time that a minority-preferred candidate in District 63 lost an election?

A In that situation, yes, but the rule in Virginia had been, from my recollection, with Frank Hall, which is House District 69, Betsy Carr, and House District 63, which used to be Jay DeBoer and then Senator Dance, that once you win in the primary, that the election is pretty much decided. So Frank Hall had won and defeated a minority candidate when it was a black majority-minority in '91 and, I think, '93.

Q In 1993, okay.

A I believe it was '93.

JUDGE PAYNE: Wait a minute. Was Frank Hall in 63?

THE WITNESS: No, sir. I'm sorry. I answered his question with a compound answer. Mine was, did I do an analysis of all the districts.

JUDGE PAYNE: Going back to Frank Hall, Frank Hall was elected when?

THE WITNESS: He was elected in 1976, and when –

JUDGE PAYNE: That was a majority black district?

[455] THE WITNESS: I don't believe, not at the time. I think it became in the 1980s, I believe.

JUDGE PAYNE: He continued to be reelected until he resigned when?

THE WITNESS: Yes, sir. He resigned in 2007, but when they redrew the line significantly in 1991, he had a challenger, and he won in that primary and never had a primary challenger after that.

JUDGE PAYNE: The number of that district was what?

THE WITNESS: 69.

- Q I was going to ask you about 69 next, but I take it your answer with respect to 69 to my question, which is sitting here today, can you tell us the last time a majority-preferred candidate has lost an election before I said in District 63, but so the record is clear, in District 69, is it 1993?
- A 1993 was Frank Hall, and I believe I can't recall if there was another primary after that in the 2000s. I don't believe there was from my recollection.
- Q Sitting here today, can you tell us the last time a minority-preferred candidate lost an election in District 63? That was the one I started with, but I think you answered regarding 69.
- A 63, I believe it was Joe Preston to Jay DeBoer, and I [456] don't believe that DeBoer had any other challenges until he retired in 2001.

JUDGE PAYNE: Joe Preston lost to Jay DeBoer.

THE WITNESS: Yes, sir, who was Caucasian, and then he ran unopposed, if I recall correctly, Jay DeBoer did, and he retired when we redrew the lines

in 2001, and then Delegate Fenton Bland, I believe, won that seat who is African American.

- Q Let me ask you, Delegate Jones, are you equating the candidate being African American with the minority-preferred candidate?
- A I'm equating the when you looked at the results in the there were several races. You had Betsy Carr, which was a three- or four-way race I think it was a four-way race. When you look at the one-on-one race, I believe, that occurred in the primary, the overwhelming majority of the African Americans chose from the I think the work that was done or was looked at in the Loewen report that they overwhelmingly preferred Joe Preston, but Jay DeBoer won. That's 63rd which, I think, was your question.
- Q Thank you, sir. So you don't equate African-American candidate with minority-preferred candidate?
- A No, not at all, sir. I think I answered that in a deposition as well.
- [457] Q Sitting here today, can you tell us the last time a minority-preferred candidate lost an election in challenged District 70?
- A I don't believe that there has ever been one that's lost in no, 70, that would be McQuinn's. During my tenure, it's always been held by an African American, to my knowledge.
- Q And with respect to District 71, sitting here today, can you tell us the last time minority-preferred candidate lost an election in District 71?
- A I don't believe they have because of the high affinity of the democratic vote in that district.

- Q And can you tell us in fact, District 71 has been represented by an African American since the early '80s?
 - A I would say at least, yes, sir.
 - Q Maybe late '70s?
- A Probably late '70s, but I don't know that for a fact, so I don't want to misrepresent anything.
- Q Fair enough. And can you tell us the last time a minority-preferred candidate has lost an election in District 74?
- A If I may, I believe when Delegate Morrissey ran in a five-way primary, he was certainly not the candidate of choice of the minorities at that point in time. There were four African Americans that ran against him. He was [458] the only Caucasian, and he won. Just like in the DeBoer case, situation, Frank Hall case, typically, in those situations, whoever wins the democratic primary will win the general, and then they stay in that seat pretty much as long as they want to.
- Q So Mr. Morrissey, though, won reelection in 2009, did he not?
 - A So did Jay DeBoer in the '90s, yes, sir.
- Q Right. So Mr. Morrissey, at least as late as 2009, was the African-American preferred candidate; isn't that correct?
- A I would say based on the election returns of him being sent back to Richmond, one would make that assumption, yes, sir.
- Q And challenged District 75, can you tell us the last time a minority-preferred candidate has lost an election in District 75?

- A Well, Paul Council, Delegate Paul Council actually held that seat for 31 years, I believe, or 32 years, and it was African American in the '80s. After the court case, I believe it became for multi-member districts to single-member districts. He held that seat, had several challenges throughout the, I think, those 20 years, and then when he retired in 2005, I believe, Delegate Tyler ran in the primary, and there were five contestants, two [459] which were Caucasian, and Delegate Tyler won by only less than 300 votes. And then the general election with a Caucasian running against her, she won by less than one and a half percent.
- Q So if I understood you correctly, the person who held the seat before Delegate Tyler was an African American?
 - A No, Caucasian. He was Caucasian.
- Q Okay. So Delegate Tyler, though, has not been defeated in any election including the one you just mentioned; correct?
- A I don't believe she's had an opponent after 2005. She barely won against a weak opponent, by all accounts, in the election in 2005.
- Q But that's the last time that she's had an opponent?
- A Right, and that drove her concerns about her district being much higher than 55 percent, yes, sir.
 - Q And that was in 2005, so ten years ago?
 - A 2005.
- Q And challenged District 77, when was can you tell us the last time a minority-preferred candidate lost an election in District 77?

- A Yes. I would say it was probably Willa Bazemore. At the time, after 1991 when the districts were redrawn, we created two additional majority-minority districts, I believe, during that cycle. I believe Thomas Forehand, [460] who went on become a judge, actually defeated Willa Bazemore in a general election by five or six points.
- Q So 1991 was the last time that a minority-preferred candidate lost an election in District 77; is that what your testimony is?
- A And to put it in the proper context, Delegate Spruill would have won in 1993 and has served in that capacity ever since.
- Q Thank you. That's helpful. Districts 80, can you tell us the last time a minority-preferred candidate has lost an election in District 80?
- A I believe that has been held by an African American as long as I can remember. Ken Melvin actually held that seat prior to Matthew James. I think Ken Melvin was there for 20-plus years, 24 years, I think.

JUDGE PAYNE: Melvin was what race?

THE WITNESS: He was African American, Your Honor.

- Q And it sounds like you can't precisely remember, but can you give us kind of a decade and maybe early or late part of the decade in terms of how far back that seat, District 80, has been held by a minority-preferred candidate?
- A I can't recall when it was first established because I was still in high school probably, college, but to my [461] knowledge, it has been held by an African American since the '80s, I believe.

- Q Fair enough, thank you. Can you tell us the last time a minority-preferred candidate has lost an election in District 89?
- A I can't in that regard. I can recall working with then-Delegate Alexander on the configuration of his district.
 - Q And can you tell us -

JUDGE LEE: What race is Alexander?

THE WITNESS: He is African American, Your Honor.

- Q Can you tell us the last time a minority-preferred candidate has lost an election in District 90?
- A You know, we've lost three districts in that city, and so to say that district is not the same as it might have been, you know, 20 years ago because there were five seats in the city of Norfolk. I believe that has been held by a minority candidate since the early '80s, I believe.
- Q Okay. Thank you. Can you tell us the last time a minority-preferred candidate lost an election in District 92?
- A I do not I'm trying to think who her predecessor was. That would be Delegate Ward. I would say probably has been held by a minority since its inception, but I stand to be corrected if I'm wrong.
- [462] Q Can you tell us the last time a minority-preferred candidate lost an election in District 95?
- A I believe Flora Crittenden was the member there, and she served 30-plus years. I believe the two – there were two African-American females that represented those two districts on the peninsula for 30 – probably between 24 and 30 years. One was a

schoolteacher and maybe principal, and I forget what the other one did.

Q You, of course, knew this election history when you drew the enacted map; is that true?

A I did.

- Q Did you consider minority registration rates in each of the challenged districts when you were drawing the enacted map?
- A Certainly. That's part of the equation, the lower voter turnout concern that many members, African-American members had, and I think you heard that spoken to on the floor of the House of Delegates in some of the clips you saw yesterday. It was certainly expressed to me during the process, a lower registration and a lower voter turnout.
- Q Did you look specifically at each district, at the registration rate for each district, the black registration rate?
- A You know, I did not, and I would say to maybe shorten [463] the line of questioning, I did not do an ecological retrogression analysis. I did a functional analysis of the plan, talking with the community, with the members, and looking at election results. That was the extent of what I did.
- Q Yes, Delegate Jones, I wasn't asking you about an ecological regression analysis actually. I was really just asking you whether you had considered the voter registration rates of African Americans in each of the challenged districts before or during the time that you were drawing the enacted plan.
- A I would say I did in the majority, but I can't say for certain every one. Listening to members come to me like Delegate Tyler and Delegate Dance who lost

as an independent prior to going to the House. They were very concerned about the low turnout.

You saw Delegate Tyler's comments yesterday about the prison facilities in her district that adversely would affect the turnout and would not make a 55 percent really an effective 55 percent for the African American to win in a race.

- Q Beyond listening to the statements of the delegates, of some of the delegates themselves, did you actually look at the actual registration rates of African Americans and compare those to the registration rates of whites in the [464] challenged districts?
- A No, I didn't, because I would say that registration rates, while they might be a statistic to consider, it's really who turns out to vote, and while you have to be registered to vote, the number of registrants does not equate into turnout.
- Q Fair enough. You mentioned Delegate Tyler talking about the prisons in her district, District 75, and you recall they played a clip, I think it was yesterday, where she said that there were, I think she said 8,000 prisoners in her district; do you recall that? I think that was the number she used.
- A I do, and that was an issue that was discussed during the process. The way the census if I may, you don't get the group quarters dispersion from the census until

May or June of that year, the year that ends in a one. So we could not reallocate where those residents were. So those were counted in her district as adult population, black population and black voting-age population.

So that would have to be discounted, in my opinion, pretty heavily to get an effective voting percentage, and I think that's why, quite frankly, she voted against the bill at the end of the day. She didn't think there was enough black population to be able to have her win that seat through the balance of the decade.

[465] Q And, Delegate Jones, I appreciate that. I just want to ask you to listen to the actual question that I'm asking, which all I asked is whether you had heard Delegate Tyler say that there were about 8,000 prisoners in her district.

A I did.

Q And did you do anything to check whether that number was anywhere near accurate?

A I did.

Q You realize in terms of the way that would affect the black voting-age population, that there are only about 4,000 black prisoners in her district? And there are only about 6,000 total prisoners?

A That was not the population that I believe that I was given. I think – I can't remember where it came from. Probably DOC or maybe – might have been DOC. She gave me the figure of 8,000, so I trusted her with that.

Q You weren't aware that her figures were off, the total figure was off by more than 20 percent, and in terms of the black voting-age population, it would have been off by half?

MR. BRADEN: Your Honor, I'd object to that. We surely haven't had any evidence –

JUDGE PAYNE: I can't hear you.

MR. BRADEN: He just attempted to put something [466] into the record –

JUDGE PAYNE: 6,000 figure?

MR. BRADEN: Yes.

JUDGE PAYNE: There's no evidence of what the population is.

MR. SPIVA: It's just impeachment, but we are happy to prove the impeachment in our rebuttal case, Your Honor.

JUDGE LEE: You do that.

MR. SPIVA: Thank you.

- Q Let me move on from there. Did you look at you mentioned a minute ago that it was very important to look at turnout rates; is that fair?
 - A That's fair, yes.
- Q Did you look at minority turnout rates in each of the challenged districts while you were drawing the map?
 - A Not each of them, no.
- Q Did you look at minority registration I'm sorry, turnout rates in District 63?
 - A Did not.
- Q Did you look at minority turnout rates in District 69?
 - A Did not.
- Q Did you look at minority turnout rates in District 70?
 - A Did not.

Q Did you look at minority turnout rates in District 71?

[467] A No.

- Q Did you look at minority turnout rates in District 74?
- A I did look at the precinct results for the primary, yes.
- Q Did you look at minority turnout rates for District 75?
- A Yes, I did. I think I mentioned that yesterday. There were like five precincts that had single-digit votes for the now-incumbent member who wanted to get rid of those precincts because they were so heavily had a much higher turnout than the white precincts in her district.
- Q Did you look at minority turnout rates for District 77?
- A No. I talked directly with the member, Lionel Spruill.
 - Q But you didn't look at minority turnout rates?
- A No. I'll answer blanketly I'll answer your questions. I didn't look at turnout rates except in two or three of the districts.
- Q Do you recall which of those two or three districts you looked at turnout rates?
- A It would have been the 74th because they had a primary. It would have been 75, and I believe I did look at 63. I think there was a primary. I think I might have looked at the race, the independent race when Delegate [468] Dance then-Mayor Dance ran as an independent. I do recall doing that. So if you want to

say the turnout rate, I looked at the election results from that. So I did 63, 74, and 75.

- Q And the race you just mentioned with Delegate Dance, what year was that in?
 - A I'm trying to remember.
 - Q Was it 2005?
 - A I don't recall.
- Q And when you were drawing the challenged districts, did you review the Senate districts, the state Senate districts that were drawn at the same time in those areas?
 - A I did not.
- Q Are you aware that the Senate map, that in the Senate map all of the majority-minority districts are less than 55 percent BVAP?
- A I'll take you at your word on that. I did not study the Senate map at all, and I know that sounds strange, but it wasn't – even though it was in my bill, the deal was the Senate would lay their bill on mine, it would come back, the governor wouldn't mess with it.
- Q Fair enough. And I take it, Delegate Jones, that you did not analyze voter behavior and BVAP in prior Virginia Congressional districts?
 - A Did not. I did not do the Congressional map.
- [469] Q Did you review any maps that had been precleared from other Section 5-covered jurisdictions elsewhere in the country?
- A I did not. I had reference to the *Wilkins v. West* case and the –

- Q My question just was just did you review any maps that had been pre-cleared from other Section 5-covered jurisdictions from elsewhere in the country.
 - A I think I answered no.
- Q And did you review any maps that had been rejected by DOJ?
 - A No.
- Q Now, Delegate Jones, you know or understand what a racially polarized voting analysis is?
 - A I have heard of it, yes, sir.
- Q And in the 2011 redistricting process, you did not perform, nor did you direct anyone to perform, a racially polarized voting analysis to determine whether there was racially polarized voting in any of the challenged districts; is that correct?
- A I did not. As a practice, the state has never done a racial polarized voting study for a pre-submission, for submission to DOJ.
- Q When you say that the state has never done one, I take it you mean for the House or the Senate.
- [470] A For a plan to be pre-approved. There have been ones done with court cases that have occurred, but I was surprised when I talked to Jack Austin and Mary Spain. They said in their 30-plus years each, they had never done a racial polarized block vote study retrogression analysis in any plan that was going to be submitted for preclearance to DOJ.
- Q And is it your testimony then that in the 2011 process, that no racially polarized voting analysis was done or submitted to DOJ?
 - A That is correct.

- Q Okay. Whether Senate or House.
- A That is correct.

MR. SPIVA: Court's indulgence. I'm trying to get to a different place since we're talking about this now.

Q So you are not aware, Delegate Jones, I take it, that there was – excuse me one second. Excuse me. Court's indulgence.

You are not aware, Delegate Jones, that there was an RPV, a racially polarized voting analysis, that was done by a political scientist for the Senate map in this 2011 cycle?

A Not aware. That's what I just testified. I wasn't aware of it.

[471] Q You weren't aware that there was one, in fact, submitted to the DOJ?

A No.

MR. BRADEN: Objection, Your Honor. Is there something in the record on this submission?

JUDGE PAYNE: Haven't got anything, do you?

MR. SPIVA: Yeah, I do, actually.

JUDGE PAYNE: There's not some exhibit or something that's in the record?

MR. SPIVA: It's not in the record. I'm getting ready to offer it up, Your Honor, right now, either to refresh or impeachment as the case may be. Would you – I can pass it up in hard copy.

JUDGE PAYNE: I think he needs to see what you are talking about. It's up to him how he can read it. If you want to hand it up, hand it up, let him look at it, see if he knows about it. I thought he just said he didn't

but. . . You are trying to refresh his recollection; correct?

MR. SPIVA: Should I pass ones up to the Court?

JUDGE PAYNE: Do you have it on the screen?

MR. SPIVA: We can put it on the screen.

JUDGE PAYNE: It hasn't been admitted.

MR. SPIVA: No.

Q Delegate Jones, I take it you know Senator McEachin?

[472] A I do.

- Q And if you turn to the second page of this document, um, it's a letter on Senate of Virginia letterhead; do you see that?
 - A I do.
 - Q It's dated May 31st, 2011; do you see that?
 - A I do.
- Q And it addressed to Mr. Chris Herron, Chief Voting Section, Civil Rights Division; do you see that?
 - A I do.
- Q Do you see the numbers down in the bottom right-hand corner, VSBE 005608?
 - A Yes, sir.
 - Q I can tell you this was -

MR. SPIVA: I just want to let the Court know this was produced to us by the State. We didn't actually find it until this trial had already started and the testimony came out about there not having been racially polarized –

THE COURT: I think you want to ask him foundational questions to see if you can get it in, if you want to impeach him or whatever you said you were going to do. Go ahead and do that.

Q You see here that in the first paragraph, Delegate Jones, that it says, "I look forward to the opportunity to [473] discuss the Virginia Senate redistricting plan" –

JUDGE LEE: Do you want to ask him if he's seen this before.

- Q Have you seen this before?
- A I have not.
- Q So you weren't aware of this letter submitting submits a racially polarized voting analysis for the Senate plan?
 - A I was not.

MR. SPIVA: I'm going to come back, because there are a couple that go with this set. I want to see if it refreshes his recollection.

JUDGE PAYNE: You can take that off.

Q Delegate Jones, do you have in front of you a document with – an email from J. Gerald Hiebert to Ernest McFarland and Robert Popper dated June 1st, 2011?

A I do.

Q And attached to that, there is a document entitled, "A Voting Rights Analysis of the Proposed Virginia Senate Plan," prepared by Dr. Lisa Handley, principal, Frontier International Electoral Consulting; do you see that?

A I do.

Q Does this at all refresh your recollection that there was such an analysis done for the Senate plan?

A I have never seen this document before to my [474] knowledge. It's dealing with the Senate plan, not the House plan.

MR. SPIVA: Your Honor, he obviously has never seen these documents. They were produced by the State, though, as indicated by the Bates numbers, so we would – there's no real dispute as to their authenticity given who produced them. They are official records of the state, so we would ask that they be submitted on that basis. We didn't have them on our exhibit list. We would have but –

JUDGE PAYNE: Excuse me, Mr. Spiva. Now, since he doesn't know anything about it, isn't that now part of your rebuttal case? Isn't that the time you would offer them?

MR. SPIVA: That's probably right, Your Honor.

JUDGE PAYNE: All right, well, offer them then.

JUDGE LEE: If you have a witness, of course.

JUDGE PAYNE: Somebody proves them up or he stipulates the authenticity or you lay a foundation, we'll deal with it at the time, but this witness can't get it in, apparently.

MR. SPIVA: Thank you, Your Honor.

JUDGE LEE: Mr. Braden, we didn't mean to take your objection away, but objection sustained.

JUDGE PAYNE: I think it became moot.

[475] MR. SPIVA: Mr. Braden is so good he can get his objection without making it.

MR. BRADEN: It's always safer when I don't object.

JUDGE PAYNE: All right, anything else?

- Q Now, Delegate Jones, were you aware that Chris Marston, who worked with you and for Speaker Howell in the redistricting process, that he actually gathered information to do a racially polarized voting analysis?
- A I was not aware of that, no. Not to my knowledge. He might have been, but I don't recall.
- Q So let me ask you to turn to Plaintiffs' Exhibit 7, just see whether this refreshes your recollection. This is an email from Chris Marston to Katie Alexander Murray, subject, RPV Leadership Roster, date, 12/9/2010. And in that, Mr. Marston sorry, give me one second. He says, "Email is okay, too. Just be careful in how you describe what you are seeking. We need to keep out any hint of unfairness," and in parentheses, Mr. Marston says, "except the fundamental unfairness of the Voting Rights Act," close parens, "or partisanship."

Says, "For example, I'm working on an important project for Speaker Howell and the House Republican Caucus. In order to develop redistricting plans for Virginia in full compliance with the Voting Rights Act, we [476] need to collect data for racial block voting analysis. One way to analyze the data is to look for elections in which an African-American candidate and a white candidate both compete either in one's primary or the general election."

Does that refresh your recollection that Mr. Chris Marston was gathering data in order to do a racially polarized voting analysis?

A I would note, I'm not copied on this, and as I mentioned in my deposition, I have never been involved with the leadership –

THE COURT: Have you seen this before?

THE WITNESS: No, sir, I have not.

JUDGE PAYNE: Talked about it with anybody?

THE WITNESS: No, sir.

JUDGE PAYNE: Mr. Spiva, I thought it would be helpful to say last night – I may not have been clear. Why don't you not read everything and tell him to read the part that you want to read, then ask him a precise question about the part that you want him to read.

JUDGE LEE: He can read it to himself. I think he can read.

MR. SPIVA: Okay.

JUDGE PAYNE: We sort of have the ability to read, too.

[477] MR. SPIVA: Okay, thank you, Your Honor.

JUDGE PAYNE: You don't – you haven't seen this; is that your testimony?

THE WITNESS: No, sir, I have not seen this email.

Q So I take it, Delegate Jones, that you weren't aware that Mr. Marston, who worked with you, actually gathered the information to do – or began gathering the information to do a racially polarized voting analysis, but ultimately one was not done.

MR. BRADEN: I would object. I'm not sure that there's anything in the record as a foundation for the formation of that question.

JUDGE PAYNE: What is it? Are you relying on the "for example" sentence for that proposition?

MR. SPIVA: I'm relying on that. I've got several other documents I was going to skip over, but now that I've got the objection, I probably need to go through them.

JUDGE PAYNE: You're going to go through something else to lay a foundation, because the "for example," he's quoting something which, I don't know, but it looks to me like he's telling her how she can say something. He's not saying he's done it.

MR. SPIVA: Your Honor, he's gathering [478] information for a racially polarized voting analysis, and he's telling his assistant how to ask for that information.

JUDGE PAYNE: Well, maybe, but you need a witness to testify to that. I don't know that that's true, and you can't discern that from this email. So if you want to prove it up, go right ahead, but the objection is sustained to the question, the form of the question.

JUDGE LEE: You can take that off the screen, too.

Q Let me ask you to turn to Exhibit 14 in that same book. On – this is an email from Chris Marston to Cortland Putbrese, subject, Help with Contested Election Information, dated 3/11/2011, and if I could ask you to read the, just the sentence that begins "To comply with the Voting Rights Act," and – just so the record is clear, Your Honors, I'd like for you to read that aloud.

JUDGE LEE: I guess the concern that we have is – if you ask him if he's ever seen it before – just having him read somebody else's emails is not admissible.

MR. SPIVA: It's somebody he worked with. It's already admitted, Your Honor. These are admitted exhibits. These are stipulated exhibits.

JUDGE LEE: But if you're going to ask this witness about other people's emails, you need to lay a [479] foundation that he's even seen it before. Can you do that first? He hasn't shown that he has a vague recollection yet, so you can't refresh recollection. It's not impeachment because it's not his statement, so lay a foundation that he's even seen it before.

- Q Have you seen this email, Delegate Jones?
- A I have not.
- Q Were you aware of Chris Jones attempting to gather information for a racially polarized voting analysis?
 - A You meant Chris Marston.

JUDGE PAYNE: Chris Marston.

Q Sorry, Chris Marston.

JUDGE PAYNE: Yes or no?

THE WITNESS: I was not aware that he was doing a racial polarized voting. I know he was looking at election returns, and the answer would be, yes, I knew he was looking at election data, but I don't know for what purpose, because I've never seen this email.

Q Why don't we move – still want to talk to you about the racially polarized voting analysis. Was there any statistical analysis done whatsoever to determine the degree of racially polarized voting in any of the challenged districts?

A No.

- Q Delegate Jones, you'd agree that for good government, [480] it's important that politicians generally don't do in private something that's fundamentally different from what they tell the public; would you agree with that?
- A You should comport yourself I think for anyone that should be the rule.
- Q And you had, as we discussed earlier, you had public hearings all over the Commonwealth prior to drawing the map about the redistricting process; is that correct?
 - A We did.
- Q Let me just direct your attention to one of the transcripts from one of the hearings, Plaintiffs' Exhibit 3. Tell me when you've got it in front of you.
 - A I'm ready.
- Q And this is on the cover it shows that this is the Redistricting Subcommittee of the Privileges and Elections Committee of the Virginia House of Delegates, date, September 22nd, 2010; location, TCC Roper Performing Arts Center in Norfolk, Virginia. This was one of the hearings that you spoke of?

A Correct.

Q And let me direct your attention to page five of the transcript, and these are part of your opening remarks at the hearing. If you want to verify that, I think your name appears a couple pages before, but I can represent to you that this is part – this is you talking.

[481] A Yes, sir.

Q You can check me out if you want to. And in here, is it fair to say that you basically summarize

three points that you want to emphasize about the redistricting process and that you kind of start towards the bottom of page five?

- A Yes, sir.
- Q You said the first one is that the redistricting process must be fair?
 - A Correct.
- Q And then the second is that it must create districts that are nearly equal in population as is practicable; correct?
 - A Yes, sir.
- Q And then finally, the third point is that the districts must comply with the law, the federal U.S. Constitution, and the Voting Rights Act; is that fair?
 - A That's fair.
- Q And there's nothing in the opening remarks, I take it, that suggests that part of the process is going to be to try to unseat Democrats.
 - A No.
- Q Or to do some kind of a partisan gerrymandering; correct?
 - A No.
- [482] Q And if we search this whole transcript, we wouldn't find anything like that, would we, that suggested that the plan and the map that you were embarking on drawing, that that was intended to unseat Democrats; is that fair?
 - A That is fair.
- Q And probably, if we looked at each of these, we wouldn't find anything each of these transcripts from

these various hearings, we wouldn't find anything like that?

- A No, you would not. I don't think one would expect that we would treat Republicans worse than we treat Democrats in the process since we had two-thirds of the chamber.
- Q And but there's nothing in these transcripts that suggests that, is there?
 - A Nope.
- Q And you recall, we looked at the House criteria we can turn to the exhibit if you need it, but you recall what I'm talking about, the House criteria for the redistricting?
 - A I do.
- Q And that was in Plaintiffs' 16, but you know the document I'm talking about. It's fair to say that there's nothing in those criteria that suggests that the goal of the redistricting process is to unseat Democrats; correct?
- [483] A That is correct. It wasn't the goal. It wasn't a goal.
- Q And there certainly wasn't anything in there that said the goal was to unseat white Democrats; correct?
- A I would say that the plan itself would have been a status quo plan that had broad-base support from the members of the caucus and the members of the black caucus. We had only nine no votes. We had 84 votes in favor of, which was very remarkable and unprecedented in the history of Virginia as far as a redistricting map.

- Q There were a lot of Democrats who voted for the plan; correct?
- A A majority of Democrats voted for the plan, yes, sir.
 - Q Even a super majority of the Democrats; right?
 - A Very close, yes, sir.
- Q And in your experience, you've had a lot of experience in politics, usually members don't don't vote for something that's against their that they perceive to be against their interest; is that correct?
- A My recollection of 2001, we didn't have anywhere near as many Democrats voting for the plan as we did in 2011.
- Q Let me turn your attention actually, we don't need the transcript for this, but you recall we reviewed several times the April 5th floor debates. This was Exhibit 35. Do you recall we've gone through that?

[484] A Yes, sir.

- Q And it's fair to say, right, that if we were to look through every page of that transcript, we wouldn't find anything about the goal of the plan to be to unseat Democrats; correct?
 - A You wouldn't because that wasn't the goal.
- MR. SPIVA: Court's indulgence. I think I'm almost done.
- Q I did have one more. I guess you can never thrust a lawyer who says he has one more question, but, Delegate Jones, I think yesterday when you were testifying about District 71, the subject of precinct 207 came up. Do you recall that?

A I do.

- Q You remember the 207 is the precinct in the Fan that Delegate McClellan and both both you and Delegate McClellan testified about?
- A I think there's two precincts. That's one of the two, yes, sir.
- Q Yes, right, but do you recall 207 was the one that Delegate McClellan said that she testified that she wanted to keep in her district?
 - A Correct.
- Q And you are aware, of course, that precinct 207 is a majority democratic district; correct?

[485] A That's correct.

- Q I think you testified that Delegate Loupassi wanted 207 in his district?
 - A That was my recollection, yes, sir.
- Q So he wanted a predominantly democratic precinct to be moved into his district; is that correct?
- A He's somewhat like me. He had a broad base support from the democratic side of the aisle, or democratic voters in his district, and he represented city council, and I think most members who serve locally on city councils actually have it's more the community of interest and the individual as opposed to the party, and that was the reason or my understanding as to why he wanted the Fan district.

JUDGE PAYNE: Delegate Loupassi is -

THE WITNESS: He is a white Republican, yes, sir.

Q Precinct 207, though, had been in HD 71 for 30 years?

- A I would say 20 years probably. I can't speak back to the '70s.
 - Q But at least 20 years?
 - A Yes, sir, I would say.
- Q And I think you had also testified yesterday that there were changing demographics in downtown Richmond; is that correct?
 - A There was, and there still is.
- [486] Q And I assume, though, that you would agree with me that there's no reason why an African-American delegate cannot represent a predominantly white area of the city of Richmond; correct?
- A No. As a matter of fact, if I may, Delegate Spruill, some of the precincts that we put in in south Norfolk are actually majority white that he wanted in his district.
- MR. SPIVA: I have no further questions. Thank you, Delegate Jones.

JUDGE PAYNE: Redirect.

MR. BRADEN: Your Honors, I will be very brief. I will just ask basically questions in three areas.

REDIRECT EXAMINATION

BY MR. BRADEN:

- Q One, HB 5001 was vetoed?
- A Correct. It was vetoed by the governor because of his concerns with the Senate districts that were overlaid on my bill.
 - Q So that plan is not before this Court; correct?
 - A That is correct.

- Q And the discussions we had in regards to the emails involving the Richmond registrar, all those emails were in reference to 5001?
 - A That is correct.
- [487] Q The matter at issue before this Court is HB 5005; correct?
 - A Yes, sir.
- Q And you made, to the best of your knowledge, the changes that were requested by the registrar in the 5005 bill which is now the plan before this Court?
 - A To the best of my knowledge, yes.
- Q I think there might be some question regarding some names that you used, so in case the Court doesn't recognize who they were, let me ask you two quick questions. Can you tell me who Mary Spain is and who Jack Austin is?
- A Mary Spain, senior attorney in Legislative Services who first came in the mid '70s, and she was doing redistricting law then, and she went through the '80 cycle, the multi-member districts. I think we had three years in a row that they ran. She was here in '90, 2000, and then she was getting ready to retire in 2010. So Mary was we called the queen of redistricting.

And Jack came from UVa, I think, via VCU to Legislative Services in 1979. So they have collectively, when we were doing the map, 60 years' experience between the two of them.

Q And they worked for both Republican and Democratic members?

[488] A That is correct.

- Q Unless my memory is wrong, they would have initially been hired when the legislature was controlled by Democrats?
 - A That is correct.
- Q And you've inquired of them, and they have no memory of the state ever doing any type of vote dilution –

MR. SPIVA: Objection, Your Honor. This calls for hearsay.

JUDGE PAYNE: Sort of does, doesn't it?

JUDGE LEE: Sustained.

MR. BRADEN: It sort of does. I withdraw that question.

JUDGE PAYNE: It's already ruled on.

- Q If I could ask just really one more question which is, in regards to I feel bad, because I feel that I didn't he asked a number of questions I should have asked of my witness, so let me go to one of the districts, HD 90, and the question regards the minority candidate of choice. Do you believe that Billy Robinson was the minority candidate of choice in HD 90?
 - A He was. He was defeated in 2002.
 - Q And was he defeated by a Republican?
 - A A Republican black female.

MR. BRADEN: Thank you.

[489] JUDGE LEE: I'm sorry. The name of that person again?

THE WITNESS: That was Billy Robinson. He was defeated by Winsome Sears who served, I think, one

term in the House. She was the first female elected black Republican.

JUDGE PAYNE: Is that it?

MR. BRADEN: No further questions, Your Honor.

JUDGE PAYNE: I think the Court has some questions. Judge Keenan, do you want to ask yours first?

JUDGE KEENAN: Delegate Jones, I have a couple questions I'd like to ask you for clarification. Part of your testimony yesterday about the difference between the Division of Legislative Services metric for black voting-page population and the Department of Justice's different metric, when did you first become aware that there was a difference in these two metrics?

THE WITNESS: I guess the day that the bill came out which was really the day, I think, it went on the floor. I can't remember exactly, but when they did their compilation, their report that showed all the population –

JUDGE KEENAN: You are saying when DLS -

THE WITNESS: Yes, ma'am, not until then.

JUDGE KEENAN: Did you ever discuss these [490] differences with the House members on the House floor?

THE WITNESS: No, ma'am. I did discuss it with Kent Stigall who was running the computer program for DLS, and he told me it included all black.

JUDGE KEENAN: Then I recall from your testimony that you said that members of the black caucus asked for 55 percent, and then you mentioned former Delegate Dance by name.

THE WITNESS: Yes, ma'am.

JUDGE KEENAN: Do you recall any other delegates who specifically asked for 55 percent?

THE WITNESS: Delegate Tyler, to my knowledge, my recollection, excuse me, and Delegate Spruill.

JUDGE KEENAN: Okay. And then I also wanted to ask you, what role did 55 percent black voting-age population, what role did that play in your map-drawing?

THE WITNESS: It was certainly a consideration of what the community and the black members had indicated to me that they thought was a sufficient population to elect the candidate of choice by the community.

In my conversation, with Delegate Spruill, and he might have mentioned it on the floor – I even had a conversation with Delegate McClellan. It's not about the incumbent member. The way I understood the law was that it's not – because I could win in my district or Lionel [491] could win in his district with a much lower percentage because I have the name recognition.

Their concern, especially when I talked to Dance, Spruill, Tyler, and Kenny Alexander, I believe, I recall correctly, was that – because Kenny was going to run for the Senate which he is a senator now – was that there be a sufficient population in that district in a primary for the candidate of choice to be able to win.

So it was aspirational. It was a rule of thumb, but the map that I created that I submitted to Legislative Services had three that were actually in the 54 percent.

JUDGE KEENAN: Did you talk about the 55 percent aspirational threshold with each of the incumbents, delegates in the 12 challenged districts?

THE WITNESS: I can't say each of them, but it was a conversation with the majority of them, I would say, yes, ma'am.

JUDGE KEENAN: Do you remember which ones? THE WITNESS: The ones I just mentioned, I believe. I'm trying to recall because I met collectively with Betsy Carr, Delegate McQuinn, and Delegate McClellan. I think we discussed it in that meeting. I'm pretty certain that we did, and I know that Delegate Spruill had met with, I believe, Matthew James, Algie Howell, and Kenny Alexander. They were in 80, 89, and 90. That was [492] his responsibility as far as talking with them, and I feel confident that he brought that up with them.

I talked with Delegate Howell, I think, one or two occasions, and I can't remember specifically if we discussed that number, but he had a concern. He was a barber, so he was not worried about getting reelected because he had probably cut everybody's hair in his district and had been there for 35 years.

So their concern was that there be enough vote there, if they were not still around, to be able to elect the candidate of their choice.

JUDGE KEENAN: Thank you. That's all I have, Judge Payne.

JUDGE PAYNE: Judge Lee.

JUDGE LEE: Was there a reason you did not mention on the floor the difference between the DLS 55 and the DOJ black?

THE WITNESS: Well, I felt that it wasn't that big – it was between .1 percent difference to .4, or maybe .3, if I recall, Your Honor. I think the 95th District might have been a one percent drop, but I think, as we discussed yesterday, Delegate McClellan's was a .4 percent.

So I didn't think that it was statistically significant based on the testimony that we had heard, [493] because DLS could not produce – to my understanding, they just – that's the way that they had their computer programed to be able to produce all black. It was in their setup, I believe. I think that's the same way they did it in 2001, but I was not aware they used a different metric than what I did, and my reasoning for using DOJ black was because we had to submit it to the Department of Justice, and I guess through conversations from the seminar I attended in Austin and talking, I guess, if I recall, with maybe one of my attorneys, maybe Dale Oldham about that. I just don't recall specifically. But mine was set up for DOJ black, so mine did not match up with theirs.

JUDGE PAYNE: Anything else? I have this question, Delegate Jones. First, you said you had met jointly with Delegates Carr, McQuinn, and there was a third person –

THE WITNESS: McClellan.

JUDGE PAYNE: And did you discuss with them the 55 percent, the need for 55 percent to be able to maintain enough to elect the minority candidate if they weren't there?

THE WITNESS: I know I did with Delegate McClellan specifically, I do recall that. But I don't – I can't say 100 percent it was discussed in that joint

[494] meeting, but I believe it was. Based on the testimony, yes, sir.

JUDGE PAYNE: Where did the 55 percent figure come from in the first place? How did we ever get that on to the table for discussion?

THE WITNESS: Well, Delegate Tyler, I know, had serious concerns, because I believe when she ran – she ran in 2005, I believe her district was about 55 percent if I remember correctly from what it was four years before.

That was a real concern because she struggled to win. She had a five-way primary race and then a general election race and barely won, won with less than 51 percent of the vote. That was important to her.

Delegate Spruill had mentioned it to me, and I can't recall who else and at what specific time, but that was what was gleaned out of the process.

JUDGE PAYNE: Is it fair to say that the 55 percent figure came from your discussions with members of the black caucus?

THE WITNESS: I would say mainly, but also comments that they might have shared with me about other members in the community. I know that Delegate Spruill had talked to the NAACP in Suffolk and Chesapeake and I think Portsmouth as well, because I asked him to talk to [495] the community and come back with their concerns.

JUDGE PAYNE: Why was the decision made to use plus or minus one percent as opposed to plus or minus two percent which had been used in the 2001 plan or plus or minus five percent which was constitutionally acceptable at the time?

THE WITNESS: We felt it better represented the one-person-one-vote, and one of our districts, Your Honor, had actually doubled in population over the balance of the decade, I think Prince William, and we had — almost every one of the African-American majority-minority precincts had decreased in population except for one, I believe.

That was a trend that we saw, Your Honor, in 2001, and I think that had been a trend over the last couple of decades with the shifts in populations.

JUDGE LEE: There was a table that somebody asked a question about yesterday, table 13. Do you know which document that was?

JUDGE PAYNE: I was the one that had the DLS numbers at the top, we think.

JUDGE LEE: I'm trying to compare the black voting-age population before the 2011 plan and then with the 2011 plan.

MR. HAMILTON: Your Honor, it might be Plaintiffs' 50, which is Dr. Ansolabehere's report.

[496] THE COURT: Isn't it 56 and 57?

MR. HAMILTON: I think the report is 50 and 51. I'm not sure that's the table –

JUDGE LEE: That's it.

MR. BRADEN: It might be Defendant Intervenors' Exhibit.

JUDGE LEE: I'm looking at what appears to be Plaintiffs' 50, says Dr. Ansolabehere's report, table four, I believe. Yes, table four.

MR. HAMILTON: Your Honor, it's Exhibit 50. Table four shows the black voting-age population for the

benchmark districts as compared to the HB 5005 districts.

JUDGE LEE: Correct, that's what I'm looking for. Do you have that in front you?

THE WITNESS: Can you give me the page number, Your Honor? I'm sorry.

JUDGE LEE: Page 72 of Plaintiffs' 50.

THE WITNESS: Yes, sir.

JUDGE LEE: I'm looking at the column that says black voting-age population, and the left reflects what? The left column, what does that reflect?

THE WITNESS: That would be the population. He's got benchmark. That would be the population as it existed when the plan – when we got the census numbers from the census bureau for the 2001 districts, as I understand it.

[497] JUDGE LEE: So then before the 2011 plan, all these districts, except for one, were over 50 percent.

THE WITNESS: Yes, sir, as far as – that would be column four, I guess, under black voting-age population.

JUDGE LEE: Yes.

THE WITNESS: That would be correct.

JUDGE LEE: Then the changes are reflected, I guess, in HB 5005.

THE WITNESS: That would be correct, Your Honor.

JUDGE LEE: Okay.

JUDGE PAYNE: Does that take care of what you need?

JUDGE LEE: It does, I think.

JUDGE PAYNE: When you were answering yesterday questions in response to Mr. Braden, you were referring to benchmark populations and using two exhibits to do that and to plan populations using DLS and black VAP. Am I correct that those were Exhibits 56 and 57 that you were referring to?

THE WITNESS: I believe so, Your Honor.

JUDGE PAYNE: A housekeeping thing I was trying to get straight in my notes. I'm sorry to hold you up. We'll take the morning recess, and if we have questions we'll get them when we come back.

[498] (Recess taken.)

NOTE: After the morning recess, the case continues as follows:

JUDGE PAYNE: Your next witness, Mr. Braden.

MR. BRADEN: Yes, Your Honor.

JUDGE PAYNE: Oh, we didn't excuse you, did we?

I guess actually both sides have a right to cross-examine based on any questions the Court asked, and we haven't given you that right.

So does anybody have a question based on any of the questions we asked?

MR. BRADEN: No, Your Honor.

JUDGE PAYNE: Mr. Spiva?

MR. SPIVA: No, Your Honor, we don't.

JUDGE PAYNE: All right. Thank you. Next witness.

You are through, thank you very much. You are welcome – you can stay around.

MR. BRADEN: Is he excused?

JUDGE PAYNE: He's excused as far as – Mr. Hamilton, do you need him in your case, Mr. Jones?

MR. HAMILTON: We do not. Thank you, Your Honor.

JUDGE PAYNE: Okay. Delegate Jones, thank you for being with us and giving us your testimony.

[499] NOTE: The witness stood down.

MR. BRADEN: And we will call Dr. Jonathan Katz. And, Your Honors, we have witness binders that I think will assist the Court.

JUDGE PAYNE: Good, thank you.

NOTE: The witness is sworn.

JONATHAN N. KATZ,

a witness, called at the instance of the defendantintervenors, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BRADEN:

- Q Can you provide the Court your name.
- A Jonathan Neil Katz.
- Q And briefly what your profession is.
- A I'm the Kay Sugahara Professor of Social Sciences and Statistics at the California Institute of Technology.
- Q And I would like to bring up Defendant-Intervenors' Exhibit number 16.

Could you identify this document for the Court.

A That's my report in this case.

- Q And if we could turn to page 25 of that report. And could you tell the Court what this is.
 - A That is my curriculum vitae.

[500] Q And is it current and complete?

- A Yes, sir.
- Q And your expertise briefly is in what area?
- A Excuse me one second while I pour some water, please.

My areas of expertise are statistical analysis and quantitative political science.

- Q Who were you originally employed by in this case?
- A I was originally retained by attorneys for the defendant.
 - Q And you prepared an expert report for them?
 - A I did.
- Q And now you're testifying for the defendant-intervenors?
 - A That is also correct.
- Q And do you remember how many times you've been an expert testimony in redistricting cases or voting rights cases?
- A I've testified about 15 or 16 times, and I have been involved in numerous other cases as a consultant.
- Q And am I correct in your experience that redistricting is often contentious and often partisan?
 - A That would be true.

Q And so, from your experience, can you identify often whether or not you're working for a Republican plan or for a Democratic plan?

[501] A Yes.

- Q And have you been a witness for Republican and Democratic stakeholders in the process?
- A Yes, I have served an expert witness in cases employed predominantly by Democratic stakeholders and predominantly by Republican stakeholders.

And then in California we have had numerous sets of election law cases where nonpartisan local jurisdictions are sued, and I've been retained by them.

Q I would like to turn to the substance of your report.

What were you retained to do?

A I was retained primarily to respond to the report of Dr. Stephen Ansolabehere, pardon my pronunciation, Steve. Particularly paying attention to compactness, racially polarized voting in elections for the House of Delegates in Virginia, and Dr. Ansolabehere's analysis of inclusion of VTDs in the 12 challenged districts.

I should say overall the focus of my report is on a reply and on those 12 challenged districts.

- Q And what work did you do in a general sense in preparing for your opinions in this report and what materials did you use?
- A Fairly standard. I reviewed the other expert reports that were available prior to my commencing work, election data, demographic data, and so forth.

[502] Q Did you examine a part of the doctor's report that deals with the division of VTDs?

A I did.

Q And I would like to turn to Defendant-Intervenors' Exhibit 16, your report, I believe it's page 19

Actually, I believe it starts on, it's Defendant-Intervenors' Exhibit – page 19. As is often the case, it's a little confusing because it shows up as page 18 on your report, correct, at the bottom?

- A Yes, the bottom of 19, correct.
- Q So there is a section beginning at that mark 4.3. What does that section do?
- A That's my examination of inclusion of voting tabulation districts in the 12 contested districts and the impact particularly examining the impact of racial composition of the districts and partisan electoral performance.
- Q And is this the part of your report that specifically responds to the other doctor's claim and excuse me, I'm trying to every time I pronounce Dr. Ansolabehere's name, I pronounce it a different way.

JUDGE PAYNE: Let's call him Dr. A, he will forgive you.

- Q Dr. A. Accept my apologies. We need more Basques to teach us how to say it.
- [503] And Dr. A.'s report, is this the section responding to his VTD report section?
 - A That is correct.

- Q And can you just give the Court a brief explanation as to whether or not first of all, do you believe that that section of his report is flawed?
- A Yes. I have concerns with the underlying statistical premise of that analysis.
- Q And can you explain to the Court why it's flawed.
- A Well, in his analysis the underlying, one of the fundamental underlying assumptions is that a voting tabulation district, a VTD, can be independently assigned to a given district. That's just not true.

Think about drawing a map. It is like the kid's game Othello, a for those of you who are math aficionados the game Go, if I want to include the third VTD in a district and I am starting at – and I have already included VTD 1, the only way I can include VTD 3 is also to include VTD 2 because I need a – the districts need to be contiguous.

And so, there is an interrelated – the assignment of VTDs is interdependent.

- Q So do you believe that his report provides anything of value to this Court in showing any issue regarding a relationship between race and the VTDs that are chosen to be included and not included?
- [504] A Again, given that assumption, which is fundamental analysis, I do not believe any valid inferences can be drawn.
- Q Can we bring up Table 1. It's on Defendant-Intervenors' page 21.

And can you tell the Court what this table is an attempt to do?

A Certainly I will do my best. And, Your Honors, if you have any questions about the details, I am happy to fill you in.

What this presents is similar to Dr. Ansolabehere's report, presents a regression that predicts the probability that a given voting tabulation district is included in one of the 12 contested districts where the predictors are the percent black voting-age population in that VTD and the average Democratic vote for statewide office.

What's different, how this analysis differs from Dr. Ansolabehere's is that we also include, although not reported here, another predictor, which is how far that VTD is from the center of the district we're looking at.

Now, this is a not a perfect fix. This is sort of a crude or poor approximation, the best I could do given the time, that allows for this dependence between districts.

So as districts get farther and farther from the core [505] of the district, their probability of being included in that district must decline. And that's what we find.

Q And -

JUDGE PAYNE: You mean as the VTD gets farther and farther away in the district, it's less likely that it's going to appear in the district?

THE WITNESS: That's correct, Your Honor. What the model says is we take the core, the center of the district, and we ask how far this VTD is.

So if you think about a district that is way on the – currently on the border of that district, that VTD has a much lower probability of having been included in that district, right, it could have been moved to the adjacent district, than one that is very close to the

core. Because again, the ones that are very close to the core, since we need to generate a compact and contiguous district, we need to include – with high likelihood would need to include the surrounding VTDs.

Does that make sense, Your Honor?

JUDGE PAYNE: I understand. Thank you.

BY MR. BRADEN: (Continuing)

Q And can you tell the Court what the central finding from this chart is as to race and party?

A Yes. So if you look at the – let's pay attention to just Specification 1, which includes both black votingage [506] population and average Democratic vote performance. The bold numbers, the first numbers, are their coefficients.

Sounds like a scary word. All it really means is since we're predicting a probability, it says that a 1 percent — so if we look at black voting-age — the coefficient on black voting-age population, which is 0.157, it says that a 1 percent increase in the black voting-age population of that VTD increases the probability that that VTD is included in one of the 12 contested districts by .15 percent.

And similarly, the average Democratic vote share, as the vote share increases, say from 50 percent to 51 percent, that change increases the likelihood that that voting tabulation district is included in the contested district by about .136 percent.

JUDGE LEE: Go over that again.

THE WITNESS: Certainly. So take a –

JUDGE LEE: I just want you – I'm sorry. I just want you to explain what you just were saying using your chart. I'm trying to follow you.

THE WITNESS: Sure. So the coefficient on average Democratic vote share is 0.136. All that means is if I took the same district and I just increased its Democratic vote performance, hypothetically, by 1 percent, the likelihood that that district would now be included in [507] the vote tabulation district, holding everything else constant, that is the black voting-age population and its distance from the center of the district, it would increase by about .136 percent.

Does that make sense, Your Honor?

JUDGE LEE: Yes, it does, now that you have explained it a second time. Thank you.

BY MR. BRADEN: (Continuing)

Q If you could explain the second column understood Specification 2.

A Again, to get some feel for the overall effect – because the issue is that, as we've heard before, testimony before, and I don't think of any surprise, African-Americans are more likely to vote for Democratic candidates in the Commonwealth of Virginia.

There is a correlation between black voting-age population in a VTD and its average Democratic vote performance.

So you see when we include either one of them individually, that's what happens in these two specifications, the effect is about the same. That they are taking the total effect of being either black – an additional black voting-age population or in average

Democratic vote performance, they are both about .25 percent.

[508] But the focus should really be on Specification 1, which is similar to Dr. Ansolabehere's report, because there the question is, is one of these two effects larger? That is, in a formal sense, in the statistical sense, is there a statistical difference between .157 and 0.136?

Substantively they are pretty close, but I am a statistician, I care about are they statistically different. And I do that by looking at the numbers in the parentheses, which are a measure of standard error.

Standard error, since we are estimating a model, I don't know it for sure. If we did, you don't need a statistician. And it's like when you often see poll report numbers, polling reported, they say the population approves of President Obama at 49 percent plus or minus three percentage points. That plus or minus three percentage points is a measure of the statistical uncertainty of that estimate.

So it says that the real number is highly likely in the balance 49 percent plus or minus 3 percent. That plus or minus 3 percent comes from those numbers on the side here. Let me cut to the chase –

JUDGE PAYNE: So the parenthetical are the margin of error?

THE WITNESS: Exactly. And so, given the margin of error, these two numbers are not statistically [509] distinguishable. So that is, in perhaps simpler terms, the impact of black voting-age population and average Democratic vote performance have an equal-sized

impact on the likelihood that a VTD would be included in one of the 12 challenged districts.

BY MR. BRADEN: (Continuing)

Q Could you conclude from this chart that race was predominant over politics in the choosing of VTDs that were in or out of a district?

A You couldn't. Although I would say something stronger. This is a very, one, very crude analysis.

And two, doesn't account for any other reasons we might want to include or not include a figure of VTD in a district.

But given this limited analysis, that's what this analysis tells me.

Q And is your crude analysis better than Dr. A.'s analysis?

A I clearly think so because, again, it allows for this clearly obvious interdependence in the creation of a district. You can't, you can't randomly or independently select a precinct to be in a district because I need it to look – I need it to be contiguous, I need it to be compact. There are other criteria. It needs to maybe perhaps maintain some communities of interest and other [510] factors which are going to constrain and jointly affect numerous VTDs about whether or not they're included in a given congressional district – given, sorry, a legislative district.

JUDGE PAYNE: Does Specification 1 purport to show the difference in the correlations between black voting-age population and Democratic vote?

THE WITNESS: Could I - I'm going to be specific, and then I'm going to try and give a more intuitive answer.

The answer is yes. What these are are not correlations though. These are really what in Dr. Ansolabehere's testimony are partial correlations or regression coefficients.

So really what we care about is the difference between these two numbers, which is about .021 percentage points. So that's the difference between the effect.

And now one wants to ask is the difference, that is that the black voting-age population is about – has an impact of about 0.21 percentage points, is that statistically different from 0? And the answer is, given the uncertainty that we have, given the data and the estimation, the answer is no.

So statistically these are a tie. You should treat these two numbers as if they're the same.

[511] JUDGE PAYNE: Which two numbers?

THE WITNESS: The two numbers are 0.157 and 0.136.

JUDGE PAYNE: And those two numbers are equal – 157 is identified with BVAP, and 136 is identified with average Democratic vote, is that right?

THE WITNESS: That's correct, Your Honor.

JUDGE PAYNE: Okay. I understand. Sorry.

JUDGE LEE: Can I ask a couple of follow questions?

THE WITNESS: Of course, Your Honor.

JUDGE LEE: So then what you did in the bottom of this Table 1, control for VTDs in challenged districts

under benchmark control for distance from the 12 benchmark challenged districts, you analyzed the Democratic vote in the 12 districts, is that right?

THE WITNESS: Yeah. It's actually all the districts in the state, but yes.

JUDGE LEE: But for this chart you did the 12 districts?

THE WITNESS: Yes.

JUDGE LEE: So they were heavily Democratic at the start?

THE WITNESS: Correct.

JUDGE LEE: And then race was also a factor you [512] analyzed in the top part. And you're saying that the difference between being black and Democrat is basically the difference between .15 percent and .13 percent in terms of the performance of those districts, those 12 districts?

THE WITNESS: Good question. And so, I didn't clearly explain this properly, so let me try one more time, Your Honor.

So it is the case that the voting tabulation districts in these 12 contested districts are on average – have higher black voting-age population and are also higher, have higher Democratic vote performance. But the VTD, the numerous VTDs that comprise these districts vary quite substantially actually on their – on both those dimensions.

And what this analysis is trying to do is to ask how does that – how does either being – having more black voting-age population in that VTD or having higher Democratic vote performance increase the likelihood

that a given VTD is included into one of the 12 contested districts.

And so, this is not about – so the coefficients are not about vote performance or black – this is actually saying, we would like to know the likelihood that a given VTD is included in one of these majority-minority [513] districts. And that becomes – and not surprising, the more African-Americans there are in that district, the more likely that precinct is to be included in one of the contested districts.

Also, probably not surprising, but probably maybe less – but maybe a little less, so is the higher the Democratic vote performance is in a given VTD, the more likely it is to be included in one of the majority-minority districts in the Commonwealth of Virginia House of Delegates map.

JUDGE LEE: Thank you for answering my question.

BY MR. BRADEN: (Continuing)

Q And again, let me make sure, I don't want to ask you to explain something that's been explained to the Court, but Specification 2, could you explain that again to the Court.

A Again, it was just – perhaps I should have – for clarity I should not have included it. But to look for the overall – it was just to show qualitatively – actually quantitatively, pardon me, that the impact of increasing independently and ignoring the other – increasing either black voting-age population or average Democratic vote performance, ignoring the impact of each other, has about the same effect.

And that's statistically not a surprise because [514] black voting-age population is highly correlated with

voting – high Democratic vote performance in a given VTD.

And so, another way of – or maybe perhaps this an easier way to think about it, .249 is basically the same as 0.25, they are substantively close. And again, given their uncertainty, they are identical.

That is another way of thinking about these. So it is a different way of looking at the same thing in Specification 1.

Does that help clarify things?

JUDGE LEE: I think I understand your premise to be that you've compared party and race as predictors that a particular VTD would be included in one of 12 districts, that's the point of this whole exercise?

THE WITNESS: That's correct, Your Honor.

JUDGE LEE: I got it, I think. But don't quiz me on it. I don't have to take a test, do I?

MR. BRADEN: Really?

JUDGE LEE: They said there would be no math.

BY MR. BRADEN: (Continuing)

Q Did you have an opportunity to review Dr. A.'s reply expert report?

A I did. His central complaint – pardon me. His central complaint about this analysis is that – I do this at the level of the entire state of Virginia and not in [515] geographic regions as he did. But this actually misses the point.

I don't disagree that if there is – there might be interesting local geography that might matter, but breaking it up into subgeographies – and I am not even sure how he did it. I am not an expert in Virginia

political or social geography – doesn't solve this interdependence. That is, I can't – if I want to have VTD 1 in, it's in the precinct, and I want to have VTD 3 that's out here, the only way I can do that is by also including VTD 2 in my map.

And so, that doesn't – doing this by subregions doesn't solve that problem.

Q And I would like to move to Defendants' Exhibit 16, page 9. Actually, it would be – in the exhibit it is page 10. It is page 9 in the report.

And that section, beginning on page 9, it's number 3, what does that deal with?

A This deals with our examining Dr. Ansolabehere's – I'm sorry, Dr. Ansolabehere's polarized – vote polarization study or ecological regression.

Q Before we get to the simple stuff, the ecological inference and ecological regression, let's do try something more simple.

Do you think that Professor A. used the right [516] data in his analysis?

A I have two concerns with the data he used. First, we were never – myself and my RAs were never able to exactly match the number of precincts he found. And we never received his data, so I have no way of verifying why that was so.

But the second issue regards to which elections he examines. All of his focus is either on presidential elections or gubernatorial elections in Virginia. Presidential elections are on-year elections, whereas House of Delegates elections are off-year elections in the parlance of political scientists.

And there is no analysis about why voting in these two types of elections are the same and, therefore, informative of how – whether or not there is racially polarized voting in House of Delegates elections.

- Q In your experience, are these usually the same?
- A Typically not. But again, ultimately that's an empirical question which can be examined.
- Q And again, as a political scientist, I know you haven't got the data, but would you think it's likely that the fact that there was a black presidential candidate might have influenced the turnout and results in some of the elections?
 - A That's more likely than not.
- [517] Q You've been hired on many occasions in Section 2 litigation and asked to do vote dilution analysis.

What election data would you think you would need to do that?

A Well, let me start with the general answer, and then we'll talk about Virginia, which raises some interesting complications.

Typically, although I'm not – looking at other races, that is races other than the jurisdiction – other than the election type under litigation, is fine, but primarily and the first thing I would look at would be the elections under contest.

So in this case I would look at elections for House of Delegates. That's the general issue.

In practice, the problem in Virginia is that so few of the House of Delegates races are contested. Actually, I haven't done an exhaustive search, it might actually

have the lowest number of contested elections per election cycle that I have ever seen.

- Q In the general elections?
- A In general elections.
- Q So would primary data have been useful to you in this?
- A Well, yes, again because in an uncontested election, I don't know who the preferred candidate is. The voters have not been given any choice. So in a sort of [518] statistical sense, that is unknowable unless I make up the answer effectively.

So in this – so, therefore, I might want to look at primaries. Which again, from my rather casual perusal and from hearing testimony, there seems to be at least more challenged primaries. And it seems to be often the point of real decision making, especially in these 12 contested districts.

- Q So if you had a report in a hypothetical case that had no primary data and used a different election cycle, would you be able to draw any conclusions from that?
- A I would be reluctant to draw any firm confusions conclusions, not confusions, about whether or not there is racially polarized voting in the election under question.
- Q And what's the value of a report looking at presidential data?
- A By itself, an interesting academic exercise, but I don't quite understand what it bears on voting in House of Delegates elections.

Q Would knowing whether or not there were black candidates in a primary and that information assist you in doing it?

A It would.

- Q So what other criticisms let me ask, using the data that Dr. A. used, do you believe it's possible to do any [519] type of valid vote dilution analysis or retrogression analysis of any type?
- A Again, that's probably a bit stronger than I would put it, counsel. I would say that that in isolation, without further analysis showing that these elections were similar in kind and in voting behavior, and without any actual examination of House of Delegates elections, I would say so.
- Q So what other criticisms do you have of Dr. A.'s report?
- A One that the Court might find more pointed headed and technical, it's the use of the statistical tools that he used. He used a tool called ecological regression which was developed in the 1950s by Leo Goodman. It was great technology in 1950. The world has come a long way in those intervening six decades.

And it was mentioned during his testimony the state of the art in this is something called ecological inference, which solves some of the problems and better exploits, that is, makes better use of the available data in this type of ecological – this type of ecological data.

Q If we can bring up Defendants' Exhibit 110, page 7.

Can you just briefly explain to the Court what this – this is from – can you tell the Court what this is.

[520] A Yes. Again, I didn't have the underlying results from Dr. Ansolabehere's report, so what we did is – what I did is we did ecological regression on the data, on our replication – on the data that we could put together on the elections, in this case for House of Delegates District 77, for the elections that we had data on.

So, for example, you see here, 2002 U.S. President. And there are three points on this graph for that – on that vertical line. The circle is the percent of our estimate using ecological regression, the percent of African-Americans that voted for President Obama, the Democratic candidate.

And here we say that estimate 1.07. That is 107 percent of African-Americans are estimated to have voted for President Obama in this election in House District 77.

I do not think elections in Virginia are fraught with fraud, so that's not possible. More than 100 percent of the African-Americans could not have voted for President Obama.

Similarly, the triangle is our estimate of whites. And the square is the estimate for nonwhite/non-African-Americans.

Q Does this chart explain why most statisticians have now probably replaced this method with ecological [521] inference?

A Yes. As you can –

MR. HAMILTON: Object to the form of the question as leading. He can ask -

JUDGE PAYNE: Let me ask you to rephrase your question.

BY MR. BRADEN: (Continuing)

- Q Have most statisticians recently moved away from this form of analysis?
- A Yes, they have. Because, again, in part, as we see here, we get blatantly incorrect answers. And again, more importantly from my perspective, it doesn't make use of all the available information in these types of aggregated data.
- Q Again I would like to move to Defendant-Intervenors' 111, figure 8.

And can you tell the Court what this chart is?

A So in an attempt to look for whether or not there is racially polarized voting, particularly in the 12 contested districts, we examined – we did ecological inference, which is this alternative. Which again I am happy to explain in detail if the Court would like. That estimates the voting behavior of again African-Americans, whites, and others in voting for House of Delegates elections.

[522] Now, recall, we had data going back to 2007 and there are 12 districts. So in principle we could have had – I guess there is 12 times five, 60 possibly elections we possibly could have examined. There are only 11 on this chart. And that's because we can only do – we can only ask the voting preferences of the electorate in elections where there was actually a contested election.

These are basically all the contested elections in the 12 districts that I had available data for.

Q Is there really sufficient data available to do an analysis that would inform this Court on these issues?

A Again, given the lack of contested races, I am reluctant to draw any firm conclusions. We can draw the conclusions in the districts and elections for which we can observe, which are these 11 on this chart, and they are indicative, and we can go through details if you like, of racially polarized voting, at least in half of them.

But I would be hesitant to draw it for the entire state without some additional analysis.

- Q If election data is thin or limited or unavailable, are there other approaches that an individual might take to reach conclusions on this?
- A Again, you would then be forced to think about I would say there is lack of quantitative evidence we can bring to bear on this. Clearly politicians, pollsters, [523] there might be other available data to look at this. That was not available to me and it is obviously not what I do.
- Q So a member of a legislative body going to the individuals who represented those particular districts and asking them, would be a reasonable alternative approach?

MR. HAMILTON: Object to the form of the question, Your Honor. A, it is not in his expert report, so it is beyond the scope of this witness' knowledge that he has been identified as an expert for.

And B, it's not in his area of expertise. He is not an expert on what legislators do or do not consider in doing redistricting.

JUDGE PAYNE: Sustained. If you want to lay a foundation, perhaps you can.

MR. BRADEN: Sure.

BY MR. BRADEN: (Continuing)

Q You've been hired many times to do racial bloc voting analysis?

A Yes.

Q And the goal of those analyses is to determine the relationship between race and voting and the ability of candidates of choice to be elected?

A That is correct.

Q So if you had an inability to come up with all the data to do that type of analysis, would you recommend to a [524] legislature a different approach?

MR. HAMILTON: The same objection, Your Honor. It is beyond the scope of the witness' identified expertise. It is not in his report.

JUDGE PAYNE: Is it in his report?

MR. BRADEN: It's not in his report.

JUDGE PAYNE: Isn't that the rule? You don't have it in your report, you can't testify to it.

MR. BRADEN: Yes, Your Honor.

JUDGE PAYNE: Sustained.

BY MR. BRADEN: (Continuing)

Q Let's turn to Dr. A.'s report, and this would be the demonstrative that was presented to this Court. And it is page 21 of 22, I guess of the pdf.

JUDGE PAYNE: Of which exhibit?

MR. BRADEN: It's in the back of the witness binder. This was not an exhibit. This was a demonstrative provided by the plaintiff to this Court.

JUDGE PAYNE: It's all the way in the back as a demonstrative, right?

MR. BRADEN: All the way in the back.

JUDGE PAYNE: Okay.

BY MR. BRADEN: (Continuing)

Q Do you recognize this document?

A Yes, I saw it yesterday in court.

[525] Q And do you know what it purports to do?

A Yes. It's similar to an exercise that plaintiffs' counsel had me do during my deposition. Oh, there, thank you.

And what it does is it takes my estimates, you see the source on the bottom, of voting behavior in a given election and asks the hypothetical question, what would happen if we were to lower the percentage of the African-American black voting-age population in that district from whatever its current number is – so, for example, in House District 69, it is 55.2 percent black voting-age population, and drop it down to 50 percent.

With the assumption that all the – since we have to maintain the overall constant population of the district, that the increase would all go to whites.

And then ask the hypothetical question, what would the election result have been in that district.

- Q And how in what way would this inform the Court's decision making on any of the issues you normally study in a vote dilution analysis?
- A Again, I think we need to back up a few steps. Ecological inference or ecological regression for that matter are asking a very particular question. They are

asking how did voters vote – how did a set of voters who showed up to vote actually vote in that election.

[526] Now, there is the trouble, and why we have to estimation is, we have secret ballots. And so, we try to use statistical tools to basically back out how on average various groups voted in that election.

What this table is being used for, as I understood it during the testimony yesterday and in my deposition, was as a way to characterize – let's call it the normal or expected Democratic vote performance. And that's not a valid use of the ecological inference or ecological regression estimates.

- Q So is there any reference in this material to primary elections?
- A I want to add one more thing, if I might, to this. So the key when you want to do this type of analysis, say ask how a Democratic –
- MR. HAMILTON: Objection, Your Honor, non-responsive. There is no question. The question was about primary elections. And the witness is now volunteering something else.

BY MR. BRADEN: (Continuing)

Q What was the key in this report?

JUDGE PAYNE: Sustained.

Q What's the key factor you haven't been able to address because of my inarticulate questioning?

MR. HAMILTON: Well, that doesn't cure the [527] problem, Your Honor. Now he's just asking him to volunteer. I think we have the same issue. So I object.

JUDGE PAYNE: Well, ask the question right.

BY MR. BRADEN: (Continuing)

Q What's the key factor you haven't been able to address to the Court on this demonstrative.

JUDGE KEENAN: Mr. Braden, could you keep your voice up, please.

MR. BRADEN: My apologies, Your Honor.

JUDGE KEENAN: Thank you.

A Look, this is not – we can do an analysis that would ask how a – say how the Democrat – how a Democratic candidate would do in this election, say in House District 69, but we'd need to – the model would be much more complex than just the ecological inference or ecological regression results which are presented here.

They would need to account for the fact of whether or not incumbents were running. So in almost all of these, all but one of these elections, incumbents are running. And need to think – because this is about a forecast of how a district will perform over the election decade. We'd want some measure of the uncertainty or the vote swings between elections.

So we can think about it, there are good years for Democrats, there are bad years for Democrats. And those [528] types of swings vary by state, and we would want to, using statistical tools, model that to get a reasonable inference.

I have done such analyses before, but this isn't it.

Q And how would you do such an -

JUDGE PAYNE: Excuse me. As I understand what you're saying, is that this demonstrative is not a valid use of the ecological inference reference because there isn't enough data for it to be considered to be valid by people in your profession? Is that what you're saying?

THE WITNESS: It's not the data. It's not the appropriate statistical model because it doesn't control for other things that we know affect elections and will affect elections in the future.

So to do that analysis, we need to observe multiple elections, say historically, to get an idea of the ebbs and flows we see in political fortunes of the parties at the district level, which this doesn't do.

This is like a – think of this, Your Honor, as a snapshot in time, we're observing one election, and these are perfectly valid inferences about a given election, but it's not fully informative in a statistically valid way about what future elections might look like.

BY MR. BRADEN: (Continuing)

Q So does this demonstrative provide informative [529] information to the Court in regards to vote dilution, or racial bloc voting, or the percentage of black voting-age population necessary to elect a candidate of choice?

A Again, no for several reasons. One I've already alluded to, which is we would like to know vote performance not just in this election, but in future elections.

A secondary problem, and obvious by the fact that we only have seven districts up here, at the very least there are 12 contested districts, so there are numerous districts not here and actually numerous elections. I don't actually know which elections these are from, but they are only a scattershot of elections.

I had said, going back to a point I have already made, the real problem in analyzing House of Delegates elections in Virginia is there so many uncontested races. One would want to look perhaps at

primaries and other ways about the political process because this is just not enough data to draw any firm conclusions.

- Q Were you present for the testimony of Dr. Ansolabehere?
 - A I was.
- Q I think, and I hope I am not mischaracterizing that we've heard some testimony from him that this is a relatively quick process. [530] How long would it take you to do it?
 - A Could you clarify what this is? Sorry.
- Q Yeah, he did a racial bloc voting analysis for this Court in his report. To do one that you would think was statistically valid, how long would it take you to do?
- A So there is multiple parts to that. So it would take weeks to get the data matching a census and political data and verifying it. That is typically not done by myself. I typically ask counsel to hire data experts to do that.

Then once I received it, it would take – the ecological inference, one of the costs of it is that it is very computationally intensive. So running each election can take between two and eight hours on a very high performance computer.

So if we had election results say for every House of Delegates election that we wanted to examine, each one of those takes between two and eight hours of computer time. And probably a couple of days of my time to code up and to – to code up the analysis and then to run diagnostics and check on the other end.

- Q So have you ever been asked to do such an analysis prior to the drafting of a redistricting plan?
 - A I haven't personally, no.
- Q And how many years have you been involved in the process?
- [531] A I have been involved in the redistricting process for about 16 years, 15 years.
- Q Could you find anything useful in Dr. Ansolabeher's report in this area?
- A No. Again, given that he did not examine House of Delegates elections, and there are so few of them if he had, I would draw serious concerns about any inferences being drawn from his analysis.
- Q I would like to bring up Defendant-Intervenors' 112, figure 9.

Can you explain to the Court what this is.

- A Yes.
- Q It's on page 18.
- A So, again, a concern and what I alluded to in my discussion of that demonstrative is what you would really like to know is the performance. That is, how does the ability in this case of a candidate of choice, which in this simple analysis is going to be an African-American delegate winning election that's a very complicated set of analysis. Which is challenged in the case of Virginia in part because of the uncontested elections.

So what here is what I will call a crude or a poor man's first take on this, it's probably the first thing I would have done if I were retained in this case, which is we just across all the elections we observed, we

plotted [532] out on the horizontal access is the percent black voting-age population.

On the vertical access is the – it's misleading because it goes from 0 to 1, but it's actually discrete. That is, did the district elect an African-American delegate in that election.

And so clearly a district is either on the horizontal line at 1 or the horizontal at 0. And then we ask, what sort of the – this analysis is called a logit analysis, l-o-g-i-t. And that curve in the middle is sort of the best fitting curve we can do. And it's telling you how as you – in a simple way, given the observed elections, how does the change – how does changing black voting-age population in a precinct – sorry, in a district change the probability of an African-American delegate being elected.

And as you see, not surprising again I think to this Court, as the black voting-age population increases, that probability increases. That's why this curve is sloped upwards.

In particular, at about – since 55 percent seemed to be an interesting number in this case, if you looked at it, this curve, if you looked at 55 percent, it actually, the probability that that district would elect an

African-American delegate is about 80 percent.

[533] JUDGE LEE: What is it at 50 percent?

THE WITNESS: I would have to actually calculate it, but it looks like at about 50 percent, it's actually just close to 50 percent, maybe 52 percent.

JUDGE PAYNE: You mean when the black votingage population is 50 percent, the chance of electing a black candidate is 50 percent, is that what you are saying?

THE WITNESS: That's correct, Your Honor, in general election. These are general election data.

JUDGE KEENAN: Are you talking black candidate, or minority-preferred, or are you drawing a distinction between the two?

THE WITNESS: Again, since – I'm sorry, I cut you off.

JUDGE KEENAN: Are you drawing a distinction between black candidates and minority-preferred candidates?

THE WITNESS: Normally we would want to do that, but given we observed so few contested elections, it's very difficult to identify.

So how the analysis would really proceed if we were not data challenged in this case, is we would do ecological inference for all the observed contested elections to find out who the preferred black – which candidate African-Americans preferred in every district.

[534] We would then, instead of coding this as black, we would code that candidate and then ask – and then do this analysis on who won. I didn't have the time, and again, since we didn't have contested elections, that was not possible.

So I really want to treat this analysis as a crude, sort of best-we-can-do, short-notice analysis.

BY MR. BRADEN: (Continuing)

Q So is this chart, although – am I correct, you said this was a crude chart, crude analysis. Am I correct that you just characterized this as a crude analysis?

A Yes, I did.

Q But is this chart alone better than anything in Dr. Ansolabehere's report on this issue?

A I believe so.

JUDGE LEE: In your report on that same page you have some summary there. And I wanted to make sure that I understood what you were saying here.

THE WITNESS: Yes, Your Honor.

JUDGE LEE: You said if the districts were being packed to 55 percent, there would be a 100 percent chance that the African-American would be elected in your report?

THE WITNESS: That's correct, Your Honor. That's a hypothesis. That's not what the data says.

JUDGE LEE: Oh. I thought just a moment ago you [535] said 80 percent?

THE WITNESS: Yes. So that was a hypothetical – it's a hypothetical statement. It says that one claim that you're overpacking African-Americans in that district, then one would expect to see 100 percent or close – that is probably too strong. Close to 100 percent probability of electing an African-American delegate.

What in fact we find from this simple analysis is that it's actually about 80 percent.

JUDGE LEE: Thank you.

THE WITNESS: Is that clear, Your Honor?

JUDGE LEE: Yes, it is. Thank you.

BY MR. BRADEN: (Continuing)

Q And in the interests of time, I will just ask a couple of brief questions in regards to your compactness analysis.

Is compactness a useful measure?

A It's a problematic measure. So typically when one wants to talk about quantitatively measuring things, you have a well-defined concept. And then one asks, how does a measurer or an estimator comport with that?

The problem is compactness is actually very neat mathematically, but it's not what people mean in redistricting.

[536] So instead what happened is there has been 20-plus suggested measures of compactness. And depending upon which one you use, you get different results.

Q Is there any academic consensus as to what measure to use?

A Unfortunately there is not. Again because there is no underlying consensus but what the quantity – what compactness means formally in a mathematical sense.

Q Can you look at any individual single district in isolation to examine compactness?

A Again, it's the same concern I raised with the inclusion of a VTD in a given district. Take a part of the state near the coastline in Virginia. It has a very irregular shape. Suppose just inland from it I draw very compact, say a circle or a square, rectangular district. We will ignore any other factors that might come in.

Well, since I have to enfranchise the rest of that population, the resulting district to its say east will need to be relatively uncompact just given the coastline.

So typically one wants to think about compactness measures across an entire state and typically comparing a crossplan as opposed to saying there is any sort of absolute number of –

- Q Did it appear it appears that you used a different measure for compactness. Would you explain why you used [537] that different measure to the Court and what it was.
- A It's one called it's a center of it's the Boyce-Clark measure, slightly modified to make it easier to compute. And all that point was to show that with a different measure, which I think has some nice properties, but it doesn't it's not perfect, that you get a different finding about the relative compactness of the challenged districts than you do from the noncontested districts.
- Q Is there something about the shape of Virginia in particular that makes that measure you think useful?
- A Well, the nice thing of these they're called, a technical term called inertia or center of inertia measures is that they don't impose a geometric shape. So that most of the, excuse me, Your Honors, most of the compactness measures that have been discussed in the reports are really about inscribing perfect shapes, circles, mostly circles in this case.

The problem is, you actually can't draw a circular district because since you can't have voters in multiple districts, there is no way mathematically — or think about tiling your floor. You couldn't tile your floor in circles and get every inch of the floor. There would be leftover parts where there is grout, or in this case leftover voters who are basically not allowed to vote

[538] for a House delegate. So that's the concern with these so-called encompassing circle measures.

The nice thing about these center of gravity or inertia measures is they don't put an optimal size. They just ask, how far is the farthest voter from the center of the district.

Q And if we could bring up Defendant-Intervenors' Exhibit 61.

Your Honors, I believe you have seen this before. If we could help you out and pull up the Tidewater area.

A I didn't know that was the Tidewater area. Always nice to learn something.

This is the same point I made before. Which is, given the sort of natural geography and the underlying county structure in this part of Virginia, if you are going to obviously not include the water and maintain some semblance of these underlying counties, it can be very hard to draw a pretty looking, i.e. compact districts.

Q Your Honors, I would like to turn now to Defendant-Intervenors' Exhibit 16, page 10. It is the report on page 10.

And am I correct on page 10 you have a summary of your findings on these issues?

A That is correct, Your Honor – sorry, counsel.

[539] Q Could you just briefly provide the Court with the summary of your findings on compactness.

A Sure. Essentially point one, in a comparison of the challenged districts between the benchmark map, that is the previous map, and in the new map, HB 5005, there is essentially no substantive difference,

about 4 percent difference in compactness between those districts.

Point two –

JUDGE PAYNE: Excuse me, just for the record, we're talking about page 9 of the document, is that right?

MR. BRADEN: Page 9 of the document, page 10 in the exhibit.

JUDGE PAYNE: Go ahead.

THE WITNESS: Are you ready, Your Honor?

JUDGE LEE: Yes.

THE WITNESS: The second point, in the remaining 88 districts, those are the noncontested districts, again there is basically no difference on this measure of compactness between the benchmark map, i.e. the previous map, and HB 5005.

The third point, there is no – in the benchmark map, there is no difference between – there is no substantial difference between the compactness of the challenged districts – sorry. Let me rephrase that.

In the benchmark map there is no appreciable [540] difference between the challenged districts and the other 88 nonchallenged districts in terms of their compactness.

There is a slight, in HB 5005 the challenged districts are actually slightly more compact than they were in the original benchmark map.

And then the final point is nine of the 12 challenged districts saw increased compactness in HB 5005, as did 39 of the remaining 88 districts of the nonchallenged districts.

BY MR. BRADEN: (Continuing)

Q Dr. Katz, did you have an opportunity to review the reply report by Dr. Ansolabehere?

A I did.

Q And did you see where he indicated, I believe I'm accurately summarizing, that he felt that your compactness report was in some manner in conflict with the compactness analysis provided by Dr. Hood and Dr. Hofeller?

A I do recall that, reading that.

Q Do you believe that this – is this just a different way of doing it, or are you in conflict with them?

A Again, this goes back to my original point about these compactness measures. Which is, if you look at different compactness measures, one will find different rankings and amounts of compactness.

MR. BRADEN: Thank you.

[541] JUDGE PAYNE: I think the criticism levied by Dr. Ansolabehere was that you were in conflict with Hood and – what's the other person's name?

THE WITNESS: Hofeller.

JUDGE PAYNE: Hofeller. Do you think you are in conflict with them? If so, why?

THE WITNESS: No, I don't. Again, it goes back to this question. Which is, using different measures, choose your favorite of one of the 20 measures. One will come to different conclusions because there is not an underlying consensus about what the right measure of compactness should be.

JUDGE PAYNE: Were your conclusions different than reached by Hofeller and Hood?

THE WITNESS: Yes, because I used a different measure of compactness than they did.

JUDGE PAYNE: Are they statistically significant differences in your judgment?

THE WITNESS: Again, the compactness measures have no underlying statistical foundation, so there is no way to make that claim.

JUDGE KEENAN: So you're saying it's apples and oranges?

THE WITNESS: Yes, unfortunately.

JUDGE LEE: Is there some definitive rule [542] concerning compactness? That there is some special measure that is authoritative that we should consider?

THE WITNESS: No. That's the whole problem, Your Honor. Since there is no agreement about the fundamental quantity that is being measured, there is no way to adjudicate which of these 20 measures which have various pluses and minuses — so there is no consensus. Which I know it doesn't do the Court any good, but in academic literature there is no consensus.

JUDGE LEE: Thank you.

MR. BRADEN: If I can just ask one follow, two follow-up questions.

BY MR. BRADEN: (Continuing)

- Q Are you familiar with a well-known political scientist in this area by the name of Bernie Grofman?
 - A Of course.
- Q And do you remember what Bernie Grofman's test of compactness is?

A Bernie said – Professor Grofman said that basically all these are are the intraocular test, people look at districts maps, they figure out which districts they think look ugly, and then they choose the compactness measure which comports with their eyeball view of the mapping.

MR. BRADEN: Thank you, Your Honor.

[543] CROSS-EXAMINATION

BY MR. HAMILTON:

Q Good afternoon, Dr. Katz. It's nice to see you again.

Let's start – let's start right there. In your professional opinion, there is no professionally accepted measure of compactness, correct?

- A That is correct.
- Q So the opinions that you stated just a moment ago about the relative compactness, there is no professionally accepted measure of compactness upon which those opinions rest, correct?
- A No. Given that use of measure, those conclusions are correct. There is no accepted measure.
- Q All right. So, I mean, if we were to go to a political science convention, there would be no consensus on which of these measures to use, including the one you used to generate those conclusions, correct?
 - A That's correct.
- Q Okay. Now, you talked a little bit about, just a moment ago in Defendant-Intervenors' Exhibit 112 do you recall that? This was the crude or poor man's chart.

Looks like that.

- A Yes, of course.
- Q You recall that. And you said something about a 52 percent chance of electing a candidate?
- [544] A That was my eyeballing the intersection of 50 percent black voting-age population and where that S curve crossed it.
- Q Based on this crude and poor man's graph, what's the probability of electing the minority community electing the candidate of their choice in House District 69?
- A Again, the best estimate we would have would be about 52 percent.
- Q And how about House District 63, a different district, what's your estimate there?
 - A It would be identical.
- Q How about House District 75, a different district?
 - A Again, they would all be the same, that's -
 - Q Okay. If I keep going -

JUDGE PAYNE: Wait a minute, Mr. Hamilton.

MR. HAMILTON: I'm sorry.

JUDGE PAYNE: He was answering. You all, don't step on each other's lines. We can hear better and understand better if you do. And the court reporter can take it.

All right, go ahead.

MR. HAMILTON: Thank you, Your Honor.

JUDGE PAYNE: Now restate the question, please, sir.

BY MR. HAMILTON: (Continuing)

- [545] Q I don't want to waste the Court's time or stand between now and lunch, but if I were to go through all 12 of these districts and ask you specifically with respect to this House district or that House district, the answer would be exactly the same, right, 52 percent?
 - A Yes. That's why it's a crude analysis.
- Q Okay. And it's crude analysis because part of the limitations here is because we have a limited data set?
 - A That is also correct.
- Q And the data set that is limited is because we're looking at House of Delegates elections, is that correct?
 - A That is correct.
- Q If we were to look at some larger universe of elections, and I know you don't want to do that, but if we did look at larger universe of elections, then we might be able to get to district specific projections, correct?
 - A Actually, in this case I don't believe so.
- Q Okay. But let me just ask you the abstract question. If we look at a larger data set with more elections, then we're going to get to specific predictions on a district-by-district basis, or we could?
- A No. You would have to have ultimately that analysis, and I have done such analyses before, would rest on creating a mapping between those higher level

elections, say federal elections, and district and House [546] of Delegates elections.

And since we don't observe contested House of Delegates elections, there is no way to create that mapping.

- Q So there is simply no so your testimony is, there is no way to determine the probability of electing a candidate of choice for the minority community in any one of the 12 specific House of Delegates elections here, the data is just not available?
- A The best you can do is some version of what I do in that figure.
- Q In the poor man's graph that we were just looking at?
 - A That is correct.
- Q All right. Let's go back. You're not a lawyer, correct?
 - A That's definitely so.
- Q No legal training. In preparing for your testimony, I gather then you didn't read the District Court opinion in the *Page* case?
 - A I did not.
- Q Or the Supreme Court's decision in the *Alabama* case?
 - A I did not.
- Q Okay. Didn't review the floor debates in the House of Delegates?
 - A No, I did not.
- [547] Q Didn't review any of the materials submitted by the Commonwealth of Virginia to the

Department of Justice in connection with preclearance of this plan?

- A No, I did not.
- Q Didn't review any of the e-mails or other communications between the parties I am sorry, among the delegates during the map drawing process?
 - A No, I did not.
- Q Of course, you didn't talk with any of the delegates or do an investigation into what they said during the process?
 - A That is also correct.
- Q You didn't take into account any of the statements made by Delegate Jones about the existence or the application of a 55 percent BVAP threshold, or aspiration, or goal, correct?
- A With one slight caveat. That's why we examined the 55 percent in that graph.
- Q Okay. But you weren't looking at the statements made?
 - A That's right.
- Q You were just looking at the number 55 percent as a function of the black voting-age population?
 - A That's correct.
 - Q Okay.

JUDGE PAYNE: Mr. Hamilton, we will take the [548] lunch recess at this time.

MR. HAMILTON: Thank you.

NOTE: At this point the lunch recess is taken; at the conclusion of which the case continues as follows:

JUDGE PAYNE: Mr. Hamilton. Dr. Katz, I remind you that you are under the same oath you took earlier today.

THE WITNESS: Yes, Your Honor.

MR. HAMILTON: (resuming)

Q Dr. Katz – well, first of all, good afternoon. I hope you had a pleasant lunch.

Let's start with where we left off, your chart. If I could ask Ms. Marino to put it up on the screen. This is from Defendant Intervenors' Exhibit 112, and I believe it's the S-shaped chart that you had prepared?

JUDGE PAYNE: Same thing as figure nine to his report; is that right?

MR. HAMILTON: Correct. That's, in fact, what we've blown up, Your Honor.

JUDGE PAYNE: Thank you.

MR. HAMILTON: 112, the intervenor defendants have identified as a separate larger exhibit. We don't have it electronically.

JUDGE PAYNE: Thank you.

- Q So, Dr. Katz, if you take a look at that chart, this [549] is a chart you prepared; correct?
 - A That's correct.
- Q On the bottom of that, all those little dots, those are individual elections, aren't they?
 - A That's correct.
- Q And they're individual elections that correspond to individual House of Delegates races; right?
 - A That is correct.

- Q So on the bottom, way over in the right-hand side, there's four little dots. Do you see those?
 - A Yes. Right-hand side?
 - Q On the right-hand side.
 - A Yes.
- Q On the bottom. That's Delegate Morrissey and Carr in House District 74 and 69; correct?
 - A I believe that's correct.
 - Q They won the election?
 - A Yes.
- Q They were both their race is both white; correct?
 - A That's correct.
- Q So let's take look at your report to see if they were the black-preferred candidate of choice, and so what I'd like to do is go to Intervenor Defendant Exhibit 16, table four. That's your report, table four?

[550] A I have it.

- Q So let's look at Morrissey first. That's House District 74, and it shows toward the bottom of table four; right?
 - A That's correct.
- Q And it shows in House District 74 that 93.1 percent of the African Americans would have voted for that candidate; correct?
 - A That's correct.
- Q Fair to say that's the candidate of choice for the African-American community?
 - A Yes.

- Q Okay. Let's move to Delegate Carr in House District 69. We're looking at the same chart here. We'll start with 2013, 97.3 percent of the African-American community voted for Delegate Carr; isn't that true?
 - A That's correct.
- Q And so not a difficult decision to say here that Delegate Carr was the African American candidate of choice?
 - A In this election, that's correct.
- Q Let's look at the other election in that same House district since you brought it up, 2007. It's also the data that's reported here, same House district, 92.9 percent of the African Americans voted for Delegate [551] Carr; correct?
 - A Yes, that's correct.
- Q So in that election, too, Delegate Carr was the African-American candidate of choice?
 - A Yes.
- Q In both of these cases, even though Delegate Morrissey and Carr were white, they were the African-American candidate of choice?
 - A That's correct in these elections.
- Q While we're looking at table four, there's you'll agree with me there's nowhere on this table where you account for incumbency; correct? There's no column here that's labeled that?
- A That's correct. These are just based on the actual election data we observed.
- Q And there's nothing here that accounts for whether it was a good year for Democrats; correct?

- A That's correct.
- Q And there's nothing here that accounts for whether it was a bad year for Democrats; correct?
 - A That's also correct.
- Q And there's nothing here about any kind of future elections.
- A That's correct. As I said, this analysis is not designed to do that.
- [552] Q And, in fact, when a legislature is drawing districting maps, they don't have access to future election results; right? You don't have that data?
- A I can probably make some money if I did. We can, however, generate forecasting models that do that.
 - Q But you haven't done that here.
 - A That is correct.
 - Q Table four doesn't reflect anything like that.
 - A That's correct.
- Q All right. Now, your testimony today is based on your work in your report and your testimony before this Court is based on an analysis of the maps, the census numbers, demographic and racial data relating to the maps, and related elections data; correct?
 - A I believe that's an exhaustive collection, yes.
- Q And you also studied the expert reports from Dr. Hood, Dr. Hofeller, and Dr. Ansolabehere; correct?
- A I would say I studied Dr. Ansolabehere's report. I read quickly the two other reports.

- Q But you are not here to offer an opinion about whether race was a predominate purpose in the drafting of the House of Delegates plans; that's beyond what you were asked to do in this case.
- A That's correct. All my opinions are contained in my report.
- [553] Q You simply just have no opinion on that subject that you're here to offer the Court.
 - A Correct.
- Q Okay. So let's go back to your prior experience. You, yourself, were not involved in redistricting in Virginia at the time that the General Assembly drew these maps that are before the Court today.
 - A That's correct.
- Q So in that sense, you are similarly situated to Dr. Ansolabehere?
- A I have I assume. I don't really know if he was involved priorly, prior.
- Q You weren't a consultant to any party, either the Democrats or the Republicans, in the legislature during the preparation of these maps?
 - A That's correct.
- Q Didn't do an analysis for the state or anyone else at the time the General Assembly was preparing these maps?
 - A That's correct.
- Q And at the risk of beating a dead horse, you didn't do any sort of polarized voting analysis for the General Assembly at the time they were preparing the maps?

- A That's also correct.
- Q Okay. So let's turn to your opinions about compactness which we heard this morning. This is the [554] first time that you've ever appeared in court offering an opinion in a Voting Rights Act case with respect to compactness; correct?
 - A No.
- Q You've testified on other occasions on compactness in a Voting Rights Act case?
- A Well, I don't actually know if it was a voting rights case. It was an early California case where the overall criteria for drawing the state legislative maps was involved, and compactness and traditional and I testified about traditional redistricting criteria in that case. It was 2001. It was one of my first cases.
- Q Do you recall when I asked you this question in your deposition?
 - A I do.
- Q So what I asked you was, "Is this the first time you've been asked to give your professional opinion with respect to compactness in a Voting Rights Act case," and your answer was, "That is correct, to the best of my knowledge." Is that what you said in your deposition?
 - A Yes. Can I clarify?
 - Q Sure. Please do.
- A In that case, I did not present any numbers. I was asked in that case just to present to the Court what the traditional redistricting criteria were that included [555] compactness.

- Q I see. So you mentioned compactness in the course of describing traditional redistricting criteria, but you weren't offering an expert opinion about whether the districts were compact or not?
- A That's correct. So I just wanted to be explicit and correctly answer your question.
- Q Thank you. We covered this briefly, but in your opinion, there's no generally accepted measure for compactness?
 - A That is my opinion.
- Q And you have fundamental problems with to the best of your knowledge, there's about 20 different measures, and the fundamental problem you have is that they all lead to different answers?
- A There are at least 20, but, yes, I do agree with that statement.
- Q And you have the same concern whether we choose Boyce-Clark, the one you used, or Reock, the one that the other experts used.
 - A That's correct.
- Q I take it you disagree with the use of the Reock measure by Dr. Ansolabehere?
 - A I do for the same grounds.
- Q And you have the same objection to the use of the [556] Reock test by Dr. Hood?
- A Again, my concern is with the general measures of compactness, yes.
- Q And you have the same concern with the use of the Reock test by Dr. Hofeller?
 - A Yes.

- Q Now, another compact measure is the Polsby-Popper test; you know that one?
 - A Yes.
- Q That measure compares the area of a district to its perimeter?
- A That's actually incorrect. Actually what Polsby-Popper does is it takes the measured perimeter of the district and asks compares the area of that district to the area of a circle with the same size perimeter.
- Q You have the same conceptual problem with the use of Polsby-Popper as a measure of compactness that you do with Reock and the others; correct?
 - A That's correct.

JUDGE PAYNE: Excuse me a minute. The concern that you have with respect to all of them is that there is no definition of what compactness is?

THE WITNESS: That's correct, Your Honor.

JUDGE PAYNE: All right, thank you.

- [557] Q So you disagree with the use of the Polsby-Popper measure by Dr. Hood?
- A Disagree I disagree with the there's no accepted measure, so, yes.
- Q And you disagree with the use of the Polsby-Popper measure by Dr. Hofeller?
 - A Again, for the same reasons.
- Q And as between the measure you used and the measure they used, it's basically a coin toss on which to use?

- A As I said, the point of that was to show that using different measures leads to different conclusions.
- Q There's no compelling argument scientifically why one should be preferred to the other, in your opinion?
- A No compelling one. They both all these measures have pluses and minuses.
- Q Let's talk about the Schwartzberg test. You are familiar with that one as well?
 - A I am.
- Q That's an alternative measure, another one of these many tests?
 - A Yes.
- MR. HAMILTON: I promise I won't go through them all, Your Honors.
- A It's a bit more it's probably the most complicated of the measures because it requires integral calculus. I [558] don't know if you remember that from high school or college.
 - Q I don't.
- A Yes, it's another measure similar to the Boyce-Clark. Instead of looking at average deviations, it's looking at a normalized standard deviation of the distance from every point to the center of the district.
- Q You have the same conceptual problem with the use of this measure; right?
 - A That's correct.
- Q And the same concern or same disagreement with its use by Dr. Hood?

- A Yes.
- Q And the same concern or objection to the use by Dr. Hofeller?
 - A Correct.
- Q Okay. Now, one of the things you talked about this morning, and you described this a little bit in your expert report, is that one of your concerns with the Reock test was what you described as tile theorem; do you recall that portion of your report?
 - A I do.
- Q Because the ideal shape, as you described it, for a Reock test is a circle, and you can't create maps of the entire state using just circles; is that basically [559] correct?
- A Basically. You can't draw a map of circles and include every piece of territory in the state.
- Q Of course, Virginia isn't unique like that. That objection would be true as to the use of the Reock test in North Carolina, in South Carolina, in California, and every state in the union; correct?
- A Actually, it's a mathematical fact. That theorem is an actual mathematical theorem from geometry.
- Q You will agree with me that that mathematical theorem of geography or geometry is equally true in every state in the union; correct?
 - A That's correct.
- Q Now, you mentioned earlier in Mr. Braden's examination the shape of Virginia and that being a concern about using compactness measures because Virginia, the way that it's shaped; do you recall that testimony?

- A Again, that's not exactly what I said. What I said was there's concern about having absolute measures in a state as irregularly shaped and especially with counties as irregularly shaped as the Commonwealth of Virginia has.
- Q Now, the Commonwealth of Virginia correct me if I'm wrong on my history here the shape of that state, the Commonwealth, hasn't changed in the last ten years, has it?

[560] A To the best of my knowledge, no.

- Q So if we're looking at comparing the way that these districts changed from one redistricting to another redistricting, the shape of Virginia is a constant between the two efforts.
- A Yes. I think again, to be clear, what I said in my testimony was, I'd be concerned about setting any absolute standard, but in comparing two maps for the same state, in this case the Commonwealth of Virginia, that's a perfectly reasonable thing to do.
- Q The shape of the State of Virginia is also going to remain a constant regardless of which one of these measures of compactness that we use; right? If we use Reock, the shape looks like it looks, and if we use Polsby-Popper, the State of Virginia remains the same; correct?
 - A That's correct.
- Q Now, Dr. Ansolabehere calculated the Reock score for each of the challenged districts. Do you recall reading that in his report?
 - A Yes, I do.

- Q You don't disagree with Dr. Ansolabehere's actual calculation of the scores; you have no reason to think they're incorrect?
- A I didn't verify them, but I have no reason to think he [561] did that incorrectly. They're a pretty straightforward calculation.
- Q You don't have any reason to think that his calculation of the Polsby-Popper or Schwartzberg scores for the 12 challenged districts are incorrect either; correct?
- A Not to the best of my knowledge, but, again, I did not independently verify his numbers.
- Q In your report, you use the Boyce-Clark measure; right?
 - A That's correct.
- Q This is the first time you've done a compactness analysis?
 - A Yes.
- Q So I can't really ask you whether you always use the Boyce-Clark measure, because I guess you have. The one time you've done it today, this is the one you used.
 - A That's correct.
- Q At least as to the selection of which measure we're going to use, you disagree with both of the other two experts retained by the intervenor defendants, both of whom didn't use the Boyce-Clark test.
- A Again, my take on this was that different measures will lead to different rankings and orderings of the districts. That is what it was to illustrate. None

of [562] them are to be prioritized since there's no agreement about what they're measuring.

Q All right. Let's turn your attention to Plaintiffs' Exhibit 44. It's in one of the notebooks behind you.

A Not much space up here.

JUDGE PAYNE: 44?

MR. HAMILTON: 44, Your Honor. Plaintiffs' Exhibit 44, page ten.

Q I'll represent to you – do you have that there in front of you, sir?

A I do.

Q I'll represent to you this is an excerpt from the State of Virginia's preclearance submission prepared for consideration by the Department of Justice. On page ten, it lists the average compactness scores for both the benchmark and the enacted plan; do you see that?

A If those - if the - as long as those comply with the current plan in chapter one, yes. The name is different.

- Q It's the same. One of those measures is Reock; do you see that?
 - A That's correct.
 - Q That's the one used by Dr. Ansolabehere?
 - A Yes.
- Q And one of the measures that the Commonwealth used in reporting to the Department of Justice for preclearance [563] purposes was the Polsby-Popper test; do you see that?
 - A Yes.

- Q That was the one used by Dr. Hood and Hofeller?
 - A Yes.
 - Q And one of those measures was Schwartzberg?
 - A Yes.
- Q And that's the one one of the ones used by Dr. Hood and Hofeller?
 - A Correct.
- Q And at least in this table, the state didn't use the Boyce-Clark method at all?
 - A That's correct.
- Q You can close that book. We're done with that one. Might make you a little more comfortable there.
 - A It's a little tight fit.
- Q You didn't conduct a comprehensive analysis of split VTDs in your report, did you?
 - A That's correct.
- Q No effort to determine whether there was a larger number of VTD splits within the 12 challenged districts rather than elsewhere in the state?
 - A That's correct.
- Q And you don't dispute Dr. Ansolabehere's points on that analysis on that point; right?
- A Again, I haven't verified it, but I have no reason to [564] doubt it.
 - Q You have no reason to disagree with it?
 - A Correct.

- Q Same is true with respect to contiguity. You didn't analyze that; right?
 - A No.
- Q And you don't dispute Dr. Ansolabehere's analysis on that point.
 - A Again, no.
- Q Okay. So let's turn to what I think is probably the most fascinating part of this all, and that is the difference between ecological regression and ecological inference. You testified this morning about voting behavior and racial polarization in the 12 challenged districts; do you recall that?
 - A Yes, I do.
- Q In your report, you said, "Central to the question of whether or not increasing the African-American voting-eligible population was warranted in the challenged districts is an examination of whether or not African Americans had the ability to elect the candidate of their choice." Do you recall that?
 - A Yes.
- Q That's what you were asked to examine statistically?
- A In that part of my report in response to the analysis [565] of Dr. Ansolabehere, yes.
- Q Looking at voting behavior is important in order to determine to answer the question about ability to elect; right?
 - A Yes.
- Q We know from the census data the demographic profile of legislative districts, that is are they majority black, are they majority white, or something else?

- A That's correct.
- Q We know from the elections data the political performance of legislative districts, whether they're predominately Democrat or predominately Republican; right?
- A Yes. We actually know more than that. We actually know the quantity of numbers, but, yes.
- Q And what we try and do with this estimation is to ask, how do members of particular ethnic or racial groups vote in a particular set of elections; correct?
 - A That is correct.
- Q The problem is that we don't have the data directly because of the darn secret ballot. We can't look it up because it's all secret; right?
 - A That is correct.
- Q So what we're doing is using census data and data about ethnic or racial composition of a voting tabulation district to infer what the voting rates were for various [566] members of ethnic or racial groups in a particular election?
 - A Yes.
- Q Now, if we're looking at election results through whatever collection of elections we decide to pick, if we look at 100 House of Delegates seats, the performance of each district is going to be different from district to district, the political performance; correct?
- A Sort of. It will differ because the elections and the candidates yes, it will differ for many reasons.
 - Q It will differ in an election; yes?
 - A Correct.

- Q And it will differ between elections?
- A Yes.
- Q Almost by definition.
- A I wouldn't say by definition but almost surely.
- Q In fact, you'd be pretty surprised to find the exact same vote share for the parties or the exact same demographic profile in more than in more than one or two House of Delegates districts; isn't that true?
- A Exact if they were exact if you're talking about exact matches, yes.
 - Q You expect to see variation.
 - A Yes, you do.
- Q We can even be stronger than that, can't we? This is [567] an empirical question, and you can, in fact, affirm that the demographic profile in each of the 12 House districts that are at issue in this case, in fact, do vary from district to district; correct?
 - A Yes, they do.
- Q The same is true with respect to the actual observed political results in the 12 House of Delegates districts at issue in this case. They do, in fact, vary from district to district?
 - A Yes.
- Q So whether we use ecological regression or ecological inference to infer the vote share by racial or ethnic group within the 12 challenged districts, that analysis, in fact, generates results that are different among the 12 districts; true?

- A Potentially different, and in this case in practice, for at least for the few elections we could check, they are somewhat different.
 - Q They are different?
 - A Yes.
 - Q Not a one-size-fits-all sort of thing?
- A What do you mean? That's a little strong. I don't know what you mean by that.
- Q If we define crossover voting as cases where white voters in a district are voting for the candidate of [568] choice for the African-American voters, that, too, varies from district to district within the 12 challenged House districts, doesn't it?
- A Just to correct your statement, I think you said when you say white voters voting for the black candidate of choice, not black voters.
 - Q Correct.
 - A Yes, that would be crossover voting.
- Q Thank you. You've heard the phrase racially polarized voting before?
 - A I have.
- Q When there isn't a lot of crossover voting and a majority of blacks are voting one way and a majority of whites are voting the other way, that's called racially polarized voting; right?
- A In a simple case of a two-candidate election, that's correct.
- Q The higher the level of racially polarized voting, the more likely you're going to need a larger number of black voting-age population in order to ensure the

black minority population has the ability to elect; right?

- A That's correct.
- Q And the opposite is also true. If there's a lower degree of racially polarized voting, then you're not going to need as high a black voting-age population to allow the [569] minority population the opportunity to elect the candidate of choice; correct?
 - A Yes.
- Q But in any event, when we're looking at the level of racially polarized voting, that is likely to and, in fact, does vary between the 12 House of Delegates districts at issue in this case; correct?
- A Again, I would put it differently. We can actually at least we can't say it across all 12. We can say it across the elections that we observed in the handful in the five districts we could actually estimate the voting behavior. In those five, there was variability. I cannot say anything about the other districts.
- Q Okay. All right, well, let's take a look at your report. I'm going to go back to Intervenor Defendants' Exhibit 16. Do you have that there in front of you, sir?
 - A I do.
- Q It's the same table we're going to look at there. This is your ecological-inference-based estimates; right?
- A Yes, for the entire set that I could run on the House of Delegates elections that were contested in the 12 contested districts.

JUDGE LEE: Intervenor 16, page 24, is that what you are looking at?

MR. HAMILTON: Yes. It's actually 23 of the [570] report. The bold print on the bottom says 24. That's right.

JUDGE LEE: Thank you.

Q What's the projected white share of the vote in House District 71 in 2013?

A So, again, it's not projected. It's the estimated share of whites who voted for the democratic candidate, and that election was, if I'm reading this correctly, 71 – sorry, which district – I just lost the district – 71 in 2013, it was about 77.1 percent.

Q How about House District 95 in 2013?

A Approximately 56.9. That one is – actually you should take some care. We haven't spent much time talking about it, but to the right are these measures of constants intervals. It's a measure of uncertainty, and we actually don't know if that's above a half or slightly below a half.

JUDGE LEE: What line are you referring to again?

MR. HAMILTON: I think –

JUDGE LEE: I'm asking the witness. What line are you referring to?

THE WITNESS: If you're looking at House election 95, it's the one that says black, white, 2011, District 95 for whites – that's the vote race in the fifth column, the estimate is .56, but if you look at the two estimates [571] labeled 2.5 percent and 97.5 percent, those are the lower and upper estimates given the uncertainty of what the number could be. So it could be that less than a half voted for him, could be more.

JUDGE LEE: Okay.

- Q I'm sorry. I think we misunderstood. I asked for 2013 in House District 95.
- A I apologize.
- JUDGE LEE: That's what I was trying to figure out.
- A That was about 62 percent.
- Q 62.7 percent was the estimated white vote.
- A Correct.
- Q Now we're going to look at House District 74 in 2009.
 - A Okay. Do you want the white vote again?
 - Q Please.
- A The estimated white vote is approximately 55.2 percent.
 - Q Can you look at House District 75 in 2011.
- A Again, looking at the white vote, approximately 41.4 percent.
 - Q How about House District 90 in 2009?
- A Again, the predicted white vote is approximately 35.3 percent.
- Q So if I can direct your attention to the screen, we [572] prepared an illustrative exhibit displaying this data, the numbers you just read to us, and we presented a bar chart. This is what it would look like; correct?
- A Yes, although it doesn't include all the data, but, yes.
- Q Sure. It just includes the data we just read into the record.

- A Correct.
- Q So looking at the bar chart, this is the projected white share of the vote in five of these House districts; correct?
 - A Again, I want to be very specific –
 - Q What estimation?
- A In the actual election, the estimated fraction of whites who voted for the democratic candidate.
 - Q All right.

JUDGE PAYNE: Looking at past, not projecting the future.

THE WITNESS: Yes, Your Honor.

- Q Looking in the past. This is the estimated share of the white vote. We can certainly conclude from looking at this table that there's variation.
 - A Yes, there's some variation.
- Q Well, we can be a little stronger than some variation. It goes all the way from 71.1 percent all the way down to [573] about half of that, 35.3 percent; isn't it?
- A Yes, again, but if you want to actually compare across districts, you want to include the cost intervals, so.

Yes, as a simple bar chart, there is variability. Given the statistical uncertainty, it's less than you think it is.

- Q All right. There's statistical uncertainty as to the 71 percent figure; correct?
 - A Correct.

- Q And there's statistical uncertainty as to the 62 percent number; correct?
 - A Correct.
- Q And there's statistical uncertainty as to every single one of these five numbers; correct?
 - A That's correct.
- Q All right. Well, we're just looking at the number that you reported on your chart. If we were to plot it on a bar chart, this is what it would look like.
 - A Just the means, yes.
- Q All right. Now, Dr. Ansolabehere used a methodology that we've been referring to as ecological regression. That's sometimes called Goodman's regression; right?
 - A That's correct.
- Q You know the Supreme Court utilized ecological regression in the landmark case *Gingles v. Thornburg*; [574] right?
 - A I know from secondhand knowledge, yes.
 - Q Say that again?
- A I've never read the case, but, yes, I know that from secondhand knowledge.
- Q You prefer an alternative sometimes called ecological inference?
 - A I don't prefer. It is a better technology.
 - Q In your opinion.
 - A In my expert opinion, yes.

- Q You are not aware of any U.S. Supreme Court decisions that have cited or approved the use of that statistical technique?
- A Again, I don't often read Supreme Court decisions, so I have no way of knowing that.
- Q You don't know one way or the other; could be they do, could be they don't?
 - A Correct.
- Q I guess we'll figure that out. One of the the issue that you discussed between these two statistical measures is it is it has to do with bounding problems in creating these estimations; right?
 - A That's one issue, yes.
- Q EI combines information from Duncan and Davis methods of bounds with statistical models to estimate average [575] support for particular candidates among members of different racial groups throughout a district; right?
 - A That's correct.
- Q The advantage, as you describe it, of EI, or ecological inference, is that it uses information from all districts and allows the comparison of the results between the districts; is that right?
 - A That's correct.
- Q So the first I'm going to leave it at that rather than debate you on this. I'm sure it would be fascinating, but let's go with, the first step of the analysis, regardless of which one of these tools we're going to use, is picking the universe of elections that we're going to examine; correct?
 - A Yes. That would be the first stage.

- Q And the elections that you selected to examine were the general election results for the House of Delegates in 2007, 2009, 2011, 2013; right?
- A Yes, because those are the elections that we had data for given the time constraints, yes.
 - Q Didn't choose primaries?
 - A That's correct.
 - Q You didn't think that was necessary?
- A Again, the point of this report was to examine what Dr. Ansolabehere did, and he didn't look at any primaries, [576] so I didn't either.
- Q And you didn't think it was necessary to look at any primaries for the purposes of reaching the conclusions and opinions that you are offering to this Court?
- A With regard to Dr. Ansolabehere's report, that is correct.
- Q Do you know how many between 2001 and 2013, do you know how many contested general elections there were in these 12 challenged districts?
 - A I'm sorry, what are the years again?
 - Q Between the years 2001 and 2013.
 - A I don't. I only had data to 2007.
- Q Do you know it's a fact, isn't it, that there's a lot more contested general elections than there are primary elections in these 12 districts?
- A Again, I don't know since I haven't examined any primary election data.
- Q Okay. Let me ask you to assume that there's more than twice as many contested general elections

than there are primary elections. With that assumption in mind, whatever limitations there might be in analyzing House of Delegate elections at the general election level, it would be even worse if we looked at the primary elections on that assumption; isn't that true?

- A Worse is, again, a term. Given the sparsity of data, [577] I would want to examine both for a complete analysis.
- Q Let's put it this way: It would exacerbate the problem of scarcity of data if you had half as much data.
- A I don't agree with the premise, so that's why I'm saying no.
- Q You don't agree with the premise there were half as many primary elections? That was just a hypothetical. I'll prove it later.
- A I'm sure it's true as a matter of fact. You have no reason to lie. What I'm saying is, if you were doing an analysis, I would include both given the lack of data. You'd want to use any available for complete analysis, you want to use any data you could get your hands on.
- Q Fair enough. But that's not what you did here. You looked at the general elections.
 - A Again, that's correct.
- Q And you didn't add the primary elections in because you didn't think they were necessary.
- A Not they weren't necessary. Given the time and what I was asked to do, that was not not in my purview.

- Q Do you recall when I asked you about primary elections in your deposition?
- A I recall we talked about it. I don't recall what I exactly answered, because I don't know the exact question.
- Q Let me read it and see if you agree. Question this [578] is page 73, line 18. "How about primary elections? Did you examine primary election results?"

Your answer was, "I did not."

My question, "Why not?"

Your answer, "I didn't think it was necessary."

Do you recall that?

- A I do since it's in front of me, but that's...
- Q All right.
- A It wasn't necessary because I wasn't asked to do it.

JUDGE PAYNE: Just so I understand it, when you say you weren't asked to do it, are you referring to the fact that you were asked to criticize Dr. Ansolabehere's report? Is that what you are talking about when you say that?

THE WITNESS: That's exactly correct, Your Honor.

JUDGE PAYNE: That was your charter, and because he didn't, you didn't.

THE WITNESS: That is correct, Your Honor.

JUDGE PAYNE: All right.

Q Well, let's talk about that he didn't use House of Delegates elections either, did he? Didn't use House of Delegates general elections, he used a different set of federal and state-wide state elections; isn't that true?

- A Yes. I did the delegate analysis to show the differences in voting behavior between federal, and that [579] was raising a particular concern I had with his report and analysis he presented.
- Q Sure, but I'm only asking you about the data selection. You selected, you selected the general election results from the House of Delegates elections.

You didn't select the primary elections because you didn't think it was necessary; isn't that true?

- A It was not necessary given my task was to critique the report of Dr. Ansolabehere.
- Q But you could have critiqued Dr. Ansolabehere's report using both sets of elections and added them in, and since data scarcity was the problem, that was a choice you made?
 - A Correct, it was a choice I made.
- Q Let's it's different the approach you took was different than the approach taken by Dr. Ansolabehere. He looked at state-wide elections; right?
 - A That's correct.
- Q It's also different than the approach taken by Dr. Hood?
 - A I don't recall exactly what Dr. Hood did.
 - Q You read his report?
 - A Sometime ago, yes.
- Q I'll represent to you that he analyzed election results for state-wide elections including governor, lieutenant governor, and attorney general. Assuming that [580] what I just said is true, that's different than what you did?

- A That is correct.
- Q And assuming what I said is true, Dr. Hood's approach is similar, or at least closer, to Dr. Ansolabehere's approach than just looking at House of Delegate elections?
- A Again, since I don't haven't I haven't read Dr. Hood's report in quite some time. I don't know exactly what he did, so I'm a little hesitant to say yes or no to that question.
- Q Rather than take the time to look at his report, let me just ask you this: If we generalize it, looking at state-wide elections as a general matter is something that's closer to what Dr. Ansolabehere did rather than what you did.
 - A In that very general context, yes.
- Q Thank you. Now, in your view, since the question we're asking is how voters in Virginia vote in House of Delegate elections, we should look at House of Delegate elections primarily. That's the reason you selected them; right?
 - A That's correct.
- Q Now, there's a difference between elections in 2007 and 2009 on the one hand and elections in 2011 and 2013 on the other hand; right?
- [581] A Gubernatorial elections, yes. Different elections above them, yes.
- Q Those two sets of elections, one was done under the benchmark plan, and the other set of elections was done under the enacted plan; correct?
 - A That's correct.

- Q Now, you've identified one problem with using House of Delegate elections is that there's a limited data set; right?
 - A Yes, because so few are contested.
- Q So in 2011, for example, only two of the 12 challenged districts had a contest in which both the Democrat and Republican were running; right?
 - A That's correct.
- Q And in 2013, only three of the 12 challenged districts had a contest in which both the Democrat and Republican were running?
 - A What year was that again?
- Q In 2013, only three of the 12 challenged districts had a contest in which there was both a Democrat and a Republican running?
 - A That's correct.
- Q So let's go back to your from the data set that you created, table four of your report which is Intervenor Defendants' Exhibit 16. This is the same data set we've [582] seen before. You actually calculated, on a district-by-district basis, the ecological inference estimate, and that's what's reported here?
 - A That is correct.
- $\,\mathrm{Q}\,$ So we can look at these districts, and I won't take the time to go through them all, but in House District 95 in 2013
 - A Yes.
- Q your estimation is that not estimate. Your inference-based estimate is that the Democrat would win 89 percent of the black vote; correct?

- A That's correct.
- Q And 62.7 percent of the white vote?
- A Correct.

JUDGE PAYNE: Wait a minute. Your question was would win. I thought you were referring backwards to did win.

THE WITNESS: That is correct.

JUDGE PAYNE: We're going to avoid that problem then in the future. One is a projection, and one is looking backwards in time, and he's talking about things that have been looking backwards in time, I thought.

MR. HAMILTON: With respect, Your Honor, I think the estimate is used to project what, in a two-candidates-running –

[583] THE COURT: I'm just saying what he said it meant. I haven't reached a conclusion on the bottom line of what it does mean. Maybe you can offer different evidence, but this is how he proposed or articulated it, so you need to keep your questions on what he articulated.

MR. HAMILTON: Thank you, Your Honor.

- Q According to your estimate, the Democrat is estimated to have won 89 percent of the black vote; correct?
 - A In that election, correct.
 - Q And 62.7 percent of the white vote.
 - A That is correct.
- Q So just focusing on that district, it really doesn't matter how we configure it as long as we keep the

population in it the same, because the Democrat's always going to win, because he's winning or she's winning a majority of both the black and the white vote?

- A I told you, this is how they voted in that particular election with those particular candidates. One would do a different analysis, which I have not done, to make a forecast about how future elections would be done.
- Q You provide estimates of the share of the vote for seven of the challenged districts, seven of the 12?
- A I provide estimates again, I'd like to be very specific. I provide estimates for seven of the districts in the elections where there were contests in those years.

[584] Q Fair enough. Seven out of 12.

- A Yes.
- Q And to be precise for the record, the ones that you provided data for were House District 69, 71, 74, 75, 80, 90, and 95?
 - A That's correct.
 - Q Now, there's -

JUDGE LEE: I have a question about this. When you say contested election, do you mean that they were contested in the sense that a Republican ran against a Democrat, or do you just mean —

THE WITNESS: No. That at least one candidate received – yes, in this case, those were all Democrats and Republicans, but what we mean by contested is that there's at least – besides the – there's at least two candidates who garner five percent of the vote, and

these elections, those were all a Democrat versus a Republican to the best of my knowledge.

JUDGE LEE: Okay, Thank you.

- Q You didn't do any analysis or report any results or ecological inference estimates for the remaining five districts.
- A Again, that was not possible given there were no observed contested elections.
- Q So the answer is, correct, I didn't do any analysis [585] for those five districts?
 - A Yes.
- Q And for the record, those are House District 63, 70, 77, 89, and 92. There's nothing in your report that concerns any of those five districts at all.
 - A That is correct.
- Q And, again, the reason why is because those are the only ones that you had data you only had data for seven because you were looking at contested House of Delegate elections; right?

JUDGE PAYNE: Mr. Hamilton, he said that kind of thing two or three times. Can we avoid some of the repetition and get on with the particular points that you wish to make?

MR. HAMILTON: Yes, Your Honor.

- Q If we wanted to look at all 12 challenged districts and either apply an ecological inference or an ecological regression analysis to them, we would need to pick a different set of elections with more complete data; correct?
- A Again, I disagree with the premise. An ecological inference or regression to do what?

- Q To develop an estimate just like you have here in table four of Intervenor Defendants' Exhibit 16. If we wanted to generate that sort of result for all 12 [586] districts, we would need more data.
- A You would need data that does not exist. If your goal is to understand voting behavior of blacks, whites, and others in the contested districts in House of Delegates elections, this is all you have. I can say nothing for any other district, and there's no other data I could provide to do that.
- Q Well, sir, it's possible that we could select, like the other experts, both by intervenors and by Dr. Ansolabehere, we could use state-wide election data – your problem or concern with that is that it might not accurately estimate voter behavior in House of Delegate elections; right?
 - A I'm almost sure it wouldn't.
- Q But you don't know, because you didn't examine that question. You didn't examine the question whether a particular set of federal or state elections aligned with the observed results in House of Delegate elections? You didn't do that analysis, did you?
 - A No, I did not.
- Q So it could be that they align. You don't think it does, but it could be?
 - A It could be.
- Q And it could be that they don't align, but you don't know?

[587] A That is correct.

Q Okay. So let's look at the analysis that you did do for the seven districts that you, in fact, examined. When you were looking at them, of the seven that you

looked at, four of them you were looking at data under the benchmark plan rather than under the enacted plan; correct?

- A That is correct.
- Q That's House District 71, 74, 80, and 90?
- A Correct.
- Q The set of VTDs in 2007 and 2009 in a given district is going to be different than the set of VTDs that were used in the same district in elections in 2011 and 2013?
- A Yes, as are the voters who showed up to vote potentially, as are the candidates who potentially ran, yes.
- Q Set of VTDs between the 2007 and 2009 elections in a given district is different than the set of VTDs in the same district in 2011, 2013; yes?
 - A Correct.
- Q Now, there were only three districts out of the seven that you analyzed under the ecological inference methodology in which you found a majority of whites were voting differently than a majority of black voters; correct?
 - A Three districts, four elections, yes.
- [588] Q Another way to say that is, according to your analysis, you only found three districts in which there was racially polarized voting.
 - A In at least one election, yes.
 - Q And those were House Districts 80, 90, and 75?
 - A Correct.

- Q So let's look at your table so we can make sure we understand what that means. We're looking at table four, Intervenor Defendants' Exhibit 16. With respect to House District 80, and the year is 2009, 90.7 percent of the African Americans you estimate voted for the democratic candidate.
 - A Black democratic candidate, yes.
- Q And 35.8 percent of the whites voted for the democratic candidate.
 - A Correct.
- Q And so because, if my math is right, 64.2 percent of the whites were voting for the Republican and 90.7 percent of the African-American voters were voting for the Democrat, that's polarization?
 - A Correct.
 - Q Okay, there's one. House District 90, 2009,
- 90.8 percent of blacks voted for the Democrat according to your estimate?
 - A Correct.
- [589] Q 35.3 percent of whites voted for the democratic candidate; correct?
 - A Correct.
- Q So that means 64.7 percent of the whites voted for a Republican while 90.8 percent of the blacks voted for the Democrat; true?
 - A Correct.
 - Q That's polarization.
 - A Yes.

- Q Last one, House District 75, 2011, 88.3 percent of African-American voters voted for the Democrat; correct?
 - A Correct.
- Q Only 41.4 percent of the whites voted for the Democrat; correct?
 - A No. It's 34.8. I'm sorry we're in –
 - Q House District 75, the year is 2011.
- A You're correct. Sorry, I looked at the wrong column.
- Q That's all right. 41.4 percent of whites voted for the democratic candidate.
 - A Yes.
- Q Again, because the majority of the white voters, 58.6 percent, were voting for the Republican candidate while 88.3 percent of the African-American candidates were voting for the democratic candidate. That's another case of polarization?

[590] A Yes.

- Q That's the only three in your table out of the seven that are recorded here; correct?
- A One second, please. There's four. There's another 2013 the ones that were racially polarized elections that showed racially polarized voting were 2013, District 75; 2011, District 75; 2009, District 90; and 2009, District 80.
 - Q So only three House districts?
 - A Correct.
- Q You found racial polarization remained in House District 75 consistent. It was polarized in 2011,

it was polarized again in 2013, but it's the same House district; correct?

- A That's correct.
- Q So just three out of the seven that you there's 12 challenged districts. You looked at seven. Only three you found racially polarized voting?
- A Only three I found three were racially polarized.
- Q Fair enough. And the corollary is true also. In four, you found no racially polarized voting?
 - A That's correct.
- Q In other words, if we look at those four, we're going to see, according to your analysis, a majority of African-American voters are voting for the same candidate [591] as the majority of the white voters?
 - A In those elections, yes.
- Q And we can go through this, and I won't, but if we were to go through all four of those non-polarized voting, what we would see is majorities of both African-American voters and white voters all voting for the same candidate?
 - A That's correct.
- Q Now, in your report on page 15, you wrote, "Central to the question of whether or not increasing the African-American voting eligible population was warranted in the challenged districts is an examination of whether or not African Americans had the ability to elect the candidate of their choice." You remember that?

A Yes.

- Q That's the central question. And that's an easy question where a majority of both black and white voters are voting for the same candidate?
- A In those particular elections. The statement is actually about future elections, but, yes.
- Q We can only look we don't we can all agree that you can't tell us what's going to happen next year or the year after, and if you can, maybe you can join me in Las Vegas this weekend. You can't.
- A We can generate statistical forecasting models which I have not done in this case.
- [592] Q For the purposes of this sort of analysis, the only thing we have is looking backwards.
 - A In my report, that's all we have, yes.
- Q And according to your ecological inference model, if we just take an example of House District 69, for example, according to your analysis, they certainly have the ability to elect the candidate of their choice either year that's reported, 2007 or 2013?
 - A In those two years, yes.
- Q The same is true in House District 74; correct? The African-American population in House District 74 in 2009 had the ability to elect the candidate of their choice?
 - A That is correct.
 - Q That's an easy, easy question to answer.
- A It's answered. I don't know easy or not. It's a lot of work to do these tables.
- Q The Democratic candidate won 93.1 percent of the African-American vote; right?

- A Correct.
- Q And 52.5 percent of the white vote?
- A Yes.
- Q Same is true in House District 95; the African-American voting population in House District 95 certainly had the ability to elect the candidate of their choice in the 2013 election; isn't that true?

[593] A Yes.

- Q Democratic candidate won 89 percent of the African-American vote?
 - A Correct.
 - Q And 62.7 percent of the white vote?
 - A That's the estimate, correct.
 - Q Same is true in House District 71?
 - A In which year?
- Q Either one. Both years the African-American voting population in District 71 had the ability to elect the candidate of their choice?
- A Yes. In neither year was there presence of racially polarized voting, that is correct.
- Q Democratic candidate won 97.5 percent of the African-American vote?
- A Again, can you tell me which year you are looking at?
 - Q Either one.
 - A They vary. That's why I asked.
 - Q Sorry. It's 2013.
 - A In District 95?

- Q Democratic candidate won 97.5 percent of the African-American vote in 2013 in House District 71?
 - A That's the estimate, correct.
- Q And you estimate, according to your ecological inference analysis, that the Democratic candidate won [594] 77.1 percent of the white vote.
 - A Correct.
- Q And that's another instance in that case where the African-American population in that district certainly had the ability to elect the candidate of their choice?
 - A In that election, yes.
 - Q In both of those elections.
 - A Yes.

MR. HAMILTON: Thank you, sir.

REDIRECT EXAMINATION

BY MR. BRADEN:

- Q Some very brief redirect. I'd like to remain on table four. Am I correct that table four deals simply with general elections?
 - A That is correct.
- Q And races all involved the districts that are the challenged districts?
 - A That is also correct.
 - Q Those are all majority-minority black districts?
 - A That is also correct.
- Q Am I right, or you can tell me I'm wrong, that these would all, in a general election, be overwhelmingly safe democratic districts?

A It looks that way, yes.

[595] Q What does this chart tell us about polarized voting in primaries?

- A Absolutely nothing.
- Q And in safe elections, general elections, candidate of choice of the black and white communities are always likely to be the same in a safe district, democratically safe district? Occasionally polarized?
- A Occasionally polarized. It would depend on the exact fractions.
- Q This doesn't provide the Court with any information in regards to polarized voting in primary elections in these districts.
 - A That is correct.
 - Q You were asked to do what?
- A I was asked to essentially critique Dr. Ansolabehere's report.
- Q You were not asked to do a racial block voting analysis in regards to the level of black vote population needed in any district to meet the requirements of the Voting Rights Act?

A I was not.

MR. BRADEN: Thank you, Your Honor.

THE COURT: Can he be excused?

MR. HAMILTON: I have a few questions on redirect if it's allowed –

[596] JUDGE PAYNE: I thought we settled it with Mr. Raile that we don't do that here.

MR. HAMILTON: All right, Your Honor. Thank you.

JUDGE PAYNE: Is he through? Can he be excused permanently?

MR. BRADEN: Yes, Your Honor.

THE COURT: All right, we'll take the afternoon recess, 15 minutes. Thank you, Doctor. You are welcome to stay if you'd like to.

(Recess taken.)

NOTE: After the afternoon recess is taken, the case continues as follows:

JUDGE PAYNE: Your next witness, Mr. Braden.

MS. WALRATH: Defendant-intervenors call Dr. Trey Hood.

JUDGE PAYNE: Who is it?

MS. WALRATH: Dr. Trey Hood.

JUDGE PAYNE: Thank you.

JUDGE LEE: We have the notebooks here. You have already given us the notebooks. Thank you.

MS. WALRATH: Yes, we do have witness notebooks to aid the Court.

[597] M.V. HOOD, III,

a witness, called at the instance of the defendantintervenors, having first duly affirmed, testified as follows:

DIRECT EXAMINATION

BY MS. WALRATH.

Q Professor, are you ready?

A I'm ready.

- Q All right. Would you please introduce yourself to the Court.
- A I'm M.V. Hood, III. Most people call me Trey since I am the Third.
- Q And for the benefit of the Court, we've already identified a document, docket number 83, where in paragraph 15 the parties have stipulated to Professor Hood being an expert testimony in this case.

JUDGE PAYNE: An expert in what area, Ms. Walrath? What is he an expert in, I think is what I was trying to say and didn't say it very well.

MS. WALRATH: Yes. Well, our stipulation doesn't specify.

BY MS. WALRATH: (Continuing)

- Q So, Professor Hood, would you please note what your expertise is.
- A I'm an expert in issues revolving or relating to [598] election administration, including redistricting, Your Honor.

JUDGE PAYNE: Do you agree with that, Mr. Hamilton? Oh, excuse me, where did he go? Mr. Spiva?

MR. SPIVA: Yes, Your Honor.

JUDGE PAYNE: He is so accepted.

BY MS. WALRATH (Continuing)

- Q And, Professor Hood, just briefly what do you do?
- A I am a professor of political science at the University of Georgia. I have been at the university since 1999.

- Q And do you have any particular focus at the university?
- A My general focus is in the area of American politics and policy. More specifically, I do research and teach in the areas of Southern politics, racial politics, and electoral politics and election administration. And redistricting is a special subset of election administration.
 - Q And have you been an expert witness before?
 - A Yes.
 - Q Multiple times?
 - A Yes.
- Q Have you been an expert for private parties or state parties?

[599] A Both.

Q Now, turning to the substance of your – well, actually, let me bring up Defendant-Intervenors'

Exhibit 15. Which I believe is in your witness book if you want to, right there on your right, if you want to take it and flip it open to DI-15.

And when you get there, if you could please identify this document for me.

- A It's a copy of my expert report in this case.
- Q And if you could turn to the back of the report, it is page i in your report, but also the trial exhibit number page is 24.
 - A Okav.
 - Q What is that document?
 - A It's a copy of my curriculum vitae.

- Q And is it current and complete?
- A Yes.
- Q Okay. So turning to the substance of your report, if we could turn to page 2 of your report, which is trial exhibit page 3.

And in the sake of expediency, the pagination of the trial exhibit is one page ahead of the page report. I will refer to the trial exhibit page for everyone's convenience.

So looking at page 3, what were you retained to do?

[600] A I was asked to respond to the report issued in this case by Professor Ansolabehere. And in doing so, I primarily looked at the benchmark plan and the enacted plan and made comparisons between the two.

- Q Did you do your own assessment of the plans?
- A Yes.
- Q And what work did you do in coming to your opinions in this report?
- A I gathered various data and performed different kinds of analyses.
 - Q What data did you rely on?
- A Several different, excuse me, several different pieces of data, including census data, election data, and other reports generated from the redistricting plans.
 - Q Was there any material from the DLS Web site?
- A Yes, I did make use of I believe racial data from the DLS Web site.
- Q Flipping to page 4 of your report, section 4, entitled Plan Comparisons. What did you compare?

- A I compared the benchmark plan and the enacted plan on a number of metrics, including population, communities of interest, VTDs, whether VTDs were split or kept whole. I made some partisan comparisons between the plans. I calculated some statistics involving compactness, specifically the Reock and the Polsby-Popper tests.
- [601] Q And we will go through those in a bit. Did you reach any general opinions as to the two plans compared?
- A Overall they were similar as we will see as we move through the report.
- Q So let's do that. Looking at the first subsection you have here entitled Population Deviation. What did you conclude?
- A Well, I concluded the benchmark plan just prior to the census cycle, districts population in the districts had gotten off. And so, they needed to be population needed to be redistributed. And I determined that looking at what happened after the enacted plan was put in place, that that did occur. Population was equalized across districts, between plus or minus 1 percent deviation.
- Q And I would like to bring up the next page of your report, page 5, Table 1.

And could you please explain to the Court what this table shows.

A The 2009 districts would be the benchmark plan in the year 2009. And so, that's how far off the population had gotten since 2001 when those districts were first drawn.

So negative 20 percent, approximately, to above 138 percent.

And the 2011 districts are after the plan was redrawn, that's the enacted plan. And you can see the population [602] deviation there then ranges between minus 1 percent and plus .99 percent.

- Q Why was it necessary to bring the deviation to that range?
- A That was part of the criteria that had been drawn up in the House of Delegates for their redistricting plan.
- Q Is it fair to say that you had to redraw the benchmark plan to get to that deviation?
- A Certainly. It couldn't have been left as it was and reach those numbers.
- Q And just one point, to make sure it was the same page, when you say 2009 districts, I think you said this, but are you referring to the 2001, what we have been calling the benchmark plan?
 - A Yes.
- Q So turning to the next section of your report entitled Maintaining Communities of Interest.

What did you consider in that section?

- A Here I looked primarily at counties and independent cities. Independent cities in Virginia have the same type of designation as a county. And I was looking to see how many counties and independent cities were split across districts.
 - Q And what did you determine?
- A I determined that they were essentially if you look [603] at the benchmark plan, which in Table 2 is labeled 2009 Plan -

- Q And really quickly, before you move on, we will bring up that table, it's on the next page, on page 6 of the report.
- A The number of counties and independent cities split under the previous benchmark plan was 44 percent. And the number of counties and independent cities split under the enacted plan was also 44 percent.
- Q And can you please explain what the not split or unaffected portion of this table means.
- A That is another category. So obviously if they are split, they are split across counties or independent cities.

There were a number of splits that occurred where there was a geographic split but involved no population split.

And so, I grouped any county or independent city that was not split or was unaffected in terms of population in that category.

- Q So looking at this chart, it looks like the splits are about the same across the cycle?
 - A Yes. They are exactly the same by this chart.
- Q And is splitting of jurisdictions like this, considering that, is this a traditional redistricting [604] criteria?
- A Where possible you want to try to maintain communities of interest. It's not always possible, especially when you have other criteria like equalizing population, which can sometimes trump that criteria.
- Q So looking at the equalization of population in this criteria, do you have any conclusion as to the balancing of the two?

- A Well, given that the population deviations in the benchmark plan that were plus or minus two, then going down to a population deviation of plus or minus one in the enacted plan, it's I don't know if I should use the word remarkable, but it's a positive that they were able to keep the same number of essentially counties and independent cities whole even while reducing the population deviation across the plan.
- Q So moving on to the next section of your report, it is subsection C, we are still on page 6, it is entitled VTD Splits.

What did you – oh, actually, before we start, can you explain what a VTD is.

- A It's a voting district. It's a piece of census geography used for tabulation for census purposes.
- Q We've heard some mention of the term "precinct." Are precincts and VTDs the same?
 - [605] A They can, but they are not always the same.
- Q We were just talking about counties and independent cities. Are VTDs political subdivisions?
 - A No.
- Q So going back to section C, looking at VTD Splits, what did you look at?
- A Well, similar to the previous table, instead of using counties and independent cities, I'm looking at the number of VTDs or voting districts that are split.

So again, the 2009 column heading is the benchmark plan. There were 3.6 percent of all VTDs in that plan were split.

Q If I can stop you for just one moment. For the benefit of everybody, we're bringing up the Table 3 of his report on page 7.

Please go ahead and continue explaining what this table shows.

A Okay. So again, under the benchmark plan, which is under the 2009 Plan heading there, you can see that 3.6 percent of the voting districts were split under that plan. Versus 4.9 percent of the voting districts under the enacted plan.

So the number of split VTDs went up just slightly across the two plans.

- Q And looking at the not split or unaffected category [606] it look likes there is 95.1 percent for the 2011 plan.
- A Right. For the enacted plan, 95.1 percent of VTDs were unsplit or kept whole.
- Q Is it fair to say that's a majority of VTDs not split?
 - A Yes.
- Q If you will move on to the next section here. Actually I did have one further, before we move on, you mentioned that there was a slight increase of VTD splits between the two plans.

Can you speak to the distribution of the split VTDs.

- A The geographic distribution, is that fair?
- Q Correct.
- A They weren't necessarily cluttered in any one given part of the state.

- Q So moving on to section D entitled District Compactness, what did you evaluate?
- A Well, these are measures that we've discussed or that have been discussed in court. They are designed to measure compactness of legislative districts, and specifically there are measures here for Reock and Polsby-Popper.
- Q So we turn to Table 4 of your report, which is on page 8.

Please explain what this table shows.

MR. SPIVA: Sorry, Your Honor, I should have [607] objected a little bit sooner. Just to the compactness part of this. Because of the pretrial order, specifically Schedule A that says there should be one expert witness per discipline, and we've already had one expert from the defendant-intervenors who has talked about compactness, so I don't have any objection to the other things he is talking about, but I do have objection to this portion of the testimony.

MS. WALRATH: Your Honor, these are – Dr. Katz testified only to one measure of compactness. These are different measures.

We will have a couple experts testifying as to these measures, so we will keep it very brief so as not to waste the Court's time. But particularly given that Dr. Ansolabehere took issue with certain aspects of both Professor Hood and Professor Hofeller's reports on this subject, it is noteworthy and relevant to hear testimony on this subject.

JUDGE PAYNE: I believe that we had a telephone conference in which we discussed that he would not be able to repeat Dr. Katz' testimony, but that people

would be able to address Dr. Ansolabehere's, the measures used in Dr. Ansolabehere's testimony.

So that objection is overruled.

MR. SPIVA: Thank you, Your Honor.

[608] JUDGE PAYNE: But that's all he can do. He can't retrace the ground of Dr. Katz, you understood that?

MS. WALRATH: Understood.

BY MS. WALRATH: (Continuing)

Q Dr. Hood, just very quickly, what does this table show the Court?

A This table shows the Court a comparison again of two measures of compactness, Reock and Polsby-Popper, for all districts in the enacted plan and in the benchmark plan.

And we can just run through a quick example. Looking at the average or the mean for these measures across the two plans, we can see that the benchmark plan had a Reock score of .38. And the enacted plan had a Reock score of .36.

So there was a very slight drop there of .02.

The benchmark plan had a Polsby-Popper score, average score of .26. And the enacted plan had a Polsby-Popper score of .24.

So again, there was just a very slight drop from .26 to .24 across the two plans.

Q And how would you characterize that difference?

- A Well, I guess, as I just said, very slight. I mean, we could calculate the difference of .02. Actually .02 and .02.
- Q And we were just discussing Dr. Katz' testimony as to [609] the Boyce-Clark measure. I believe you heard his testimony in this court?
 - A I did.
- Q And is there anything fundamentally wrong with his approach?
- A I would agree with Professor Katz that there are quite a few different types of ways or different measures for compactness. And there is not really sort of an agreed upon standard amongst experts or social scientists.
- Q I think we will move on now to section E of your report, which entitled Partisanship and Incumbent Pairings.

What did you address in this section? And I am on page 9.

- A Here I looked at two different factors, they are grouped under the same heading E. I looked at a measure of district partisanship that I calculated. And I also looked at the number of incumbents that were paired under the enacted plan.
- Q And if we could pull up your Table 5, which is on page 10 of your report. There is quite a bit of information in here.

Can you please explain to the Court what this table is showing.

A Let me back up just one second and explain very [610] briefly how I came up with this measure of district partisanship.

In Virginia there is not party registration, so we have to come up with a way to estimate partisanship. I did that by creating an index of the Democratic vote share for three statewide elections in 2009. And those are for the three state constitutional offices in Virginia, governor, lieutenant governor, and attorney general. So it is an average of those three.

Q And why did you choose those elections?

A They were the closest elections proximate to the end of the benchmark plan and the beginning of the enacted plan.

And they are also representative of the odd year elections that Virginia has as opposed to using say a mid-term congressional election or a presidential election, those federal election cycles.

Q So then referring to the table if you need to, can you explain what you concluded based on your calculation of the Democratic partisanship index?

A Well, if you just look at the mean, so this would be the mean Democratic vote share across all districts, if you look at the average in 2009, it was 43.9. In 2011 it was 43.6. So there is not much movement there.

And there is not much movement – again, these [611] groupings are categorizing districts by the incumbent to the party holding the seat. So that's what Democrat, Republican, and Independent mean across the top of the header there.

Just in terms of average Democratic partisanship, if you group districts by the incumbent of the party holding the seat, there is not much movement there either.

For instance, 2009, or the benchmark plan 57.2 percent on average Democratic, versus 57.1 percent in the enacted plan in 2011.

- Q Is there any conclusion that we can draw from that?
- A Well, just on average again across the different types of districts, the partisanship, the average partisanship level remained about the same.
- Q In looking at your next table here, Table 6, what does this table touch on?
- A These are the number of incumbent parings that were produced by the enacted plan. And you can see that there are six different incumbent parings. And it gives the parties of the incumbents paired there.
- Q Is there any conclusion we can draw from this table?
- A Well, one of them is simply I would say that out of 100 potential, there are very few incumbents that are paired together against one another by the enacted redistricting plan. Half of the incumbents paired are [612] Democrat, a Democrat versus a Democrat.
- Q I would like to turn briefly to a document that we've seen many times in this courtroom so far, the Plaintiffs' Exhibit 16.
- And, Professor Hood, do you recognize this document?
 - A Yes.
 - Q Have you had a chance to read through it?
 - A Yes.

Q I would like to draw your attention to the fifth criteria, Communities of Interest. And in particular the sentence that says, "These factors may include, among others, economic factors, social factors, cultural factors, geographic features, governmental jurisdictions and service delivery areas, political beliefs, voting trends, and incumbency considerations."

Is it fair to say that the tables that we were just looking at in your report, Table 5 and Table 6, that they show the plan takes into account things like political beliefs, voting trends, and incumbency considerations?

A Yes.

Q I would like to go back to DI-15, Defendant-Intervenors' Exhibit 15, the report. Back to page 11, to move on to your subsection F titled District Core Retention.

What did you evaluate in this section of your report?

[613] A This particular section of the report looks at district core retention, which can be thought of as the percentage of the new district that is comprised of the former district. And it's measured in terms of votingage population.

So one of the ways to think about it is how many constituents the member took across the election cycle with them to their new district.

Q If we could pull up what is marked as Table 7 on page 12. It looks like we have some data on this.

What does this show the Court?

A I would say overall, overall the average across all districts for district core retention would be two-

thirds or a little bit more than two-thirds, 67.2 percent.

So on average, the member would carry across about two-thirds of their constituents from their former district to their new district.

Core retention was a little bit higher for Republican districts, Republican held districts. A little bit lower for Democratic districts. And if we subdivide Democratic districts by the race of the legislator, so minority Democratic legislators versus white Democrats, white Democratic districts actually had the lowest core retention at 58 percent on average.

Q Does core retention have any bearing on incumbency?

[614] A Core retention is an important component in re-election for incumbents, especially across redistricting cycles.

So, yes, it is related to the ability of incumbents to get re-elected across redistricting cycles.

Q And moving on, I think we're leaving the plan comparisons section of your report, turn to page 13, you have a brief Section V here.

And just quickly, what did you look at in this section?

A I looked at some documents, I believe they were on the DLS Web site about preclearance for this plan. At the time, Section 5 was still in effect, of course. And so, the State of Virginia had to have the plan precleared by the Department of Justice.

Q And was it?

A Yes.

- Q And did it at the time, to your knowledge, did Virginia also have to comply with Section 2 of the Voting Rights Act?
- A Yes, the plan needed to comply with that as well.
- Q And moving on to section VI, it looks like we're focusing on the challenged districts.

What did you evaluate in this section of your report?

- A I did a little bit more specific analysis or pulled [615] together some more specific factors together just for the 12 challenged districts. I looked at population deviations. Black voting-age population. Again the compactness scores. I looked at my index of Democratic vote strength or Democratic partisanship. Core retention. And the number of incumbents in the challenged districts that were paired against another incumbent by the plan.
- Q So starting with the first couple of those, if we could pull up Table 8 on page 14.

Which factors are addressed in this table?

- A This table looks at population and black VAP for the challenged districts.
- Q So looking at just the population portion, what does this table tell the Court?
- A The negative signs indicate that one of the challenged districts was underpopulated, and population needed to be added by the redistricting plan to bring it up to the ideal district size or close to the ideal district size.

You can see that most of the districts were underpopulated to some degree.

- Q Were there any districts that were more than 10 percent under the ideal population?
- A Yes, a number let me, it looks like six were more than 10 percent.
 - Q So half, is that correct?
 - [616] A Excuse me. Yes.
- Q Briefly, I would like to bring up what has been marked as Defendant-Intervenors' 102. It is a demonstrative exhibit.

What does this show?

A This is just a rendering of Table 8, the population deviations that we just discussed in Table 8. So it's just a graphic of that.

So that shows the degree to which these districts were underpopulated, or maybe slightly overpopulated in at least one case. That .2 percent, one district, it looks like 74 was .2 percent above the ideal district size. The others were underpopulated.

So it's just a graphic rendering of what we just discussed.

- ${\bf Q}$ Looking like 11 out of the 12 are under going left across the sheet?
- A Correct. So some degree in most of these cases, some degree of population is going to have to be added back by the redistricting plan.
- Q Moving back to Table 8 on page 14 of your report. The second right half of the report looks like it is entitled Black VAP.

What does this part of the chart show the Court?

- A This shows the Court the black voting-age population [617] in these 12 challenged districts just before enactment and right after enactment of the new redistricting plan.
- Q Where did you all obtain your data for this portion of the table?
- A This was from the Division of Legislative Services' Web site page.
- Q Looking at the last come there on the right, what does that show?
- A That just shows the difference between the two columns, the 2009 and 2011 column. Whether the black VAP was increased or decreased across the redistricting cycle.

So some went up, some went down in terms of their black voting-age population. A few hardly changed at all by maybe a fraction of a percentage point.

Q To maybe help make this a little more visual, we are going to pull up what has been marked as Defendant-Intervenors' 103, also a demonstrative exhibit.

Please explain to the Court what this shows.

A Again, this is just a graphic rendering really that last column in Table 8, the plus or minus black VAP that was added or subtracted to each one of these districts.

So you can see sometimes black VAP was added and sometimes it was subtracted.

Q For the one that I'm looking at, District 71, I believe, it looks like it's is a rather long lie. Is [618] there any reason why that one would have a greater jump?

A Well, it was, it was underpopulated by 7.3 percent.

And also, this was the district that by definition was no longer a majority black district prior to the redistricting cycle. So it was down at 46.3 percent.

Q Moving back to your report, to page 15. Pulling up Table 9, and again we will be brief with this, what does this table show?

A These are the same compactness measures we discussed just a few minutes ago, the Reock and the Polsby-Popper, although they are again just calculated in this case for the 12 challenged districts. You can see what they were at or where they were at on these measures with the benchmark plan versus the enacted plan, and whether compactness for each one of these districts increased or decreased, that's the difference column there.

So again, similar to the black VAP, in some cases compactness increased, in some cases it essentially stayed the same, and in some cases it decreased.

- Q And actually how would you characterize the difference between the two plans generally?
- A Well, I guess the easiest way to do that is to look down at the mean, which would be the average of these 12 districts on these particular metrics.

And so, we can see for the Reock measure as a group, [619] the compactness score went from .37 to .32. So it went down slightly.

And for the Polsby-Popper measure, the compactness scores across the redistricting cycle went from .23 to .19. So again, a slight decrease in compactness as a group. We look at these as a group.

- Q Were the challenged districts the only ones that had lower scores or reductions in scores?
- A No. I mean, there were other districts in the state that also had low compactness scores.
- Q So moving on to the next page of your report, page 16, Table 10. This is discussing a number of metrics as well.

What does this table show the Court?

A This is the Democratic vote average or estimate of partisanship for the districts that we discussed just a few minutes ago as well. You can see if the DVA went up or down across the redistricting cycle.

Again, if you look at the challenged districts as a group, as a whole, the DVA went down just slightly from 68.3 percent to 67.6 percent.

And then again, there is another column that just shows the difference in terms of whether the DVA, Democratic vote average for the districts, went up or down across the redistricting cycle.

The next column – or do you want me to –

- [620] Q Well, actually, I was just sticking for a second with the DVA. Is there any conclusion that we can draw from the data that you show in this table on that subject?
- A Well again, it doesn't seem as though that in terms of trying to put additional Democrats in these districts, if anything on average again, the Democratic – the Democratic vote average went down just slightly across the redistricting cycle.
 - Q So moving on to the category of Core Retention. What is this column showing?

- A That's the same measure we talked about. And again, it shows that on average for these challenged districts, these members retained about 73 percent of their constituents across the redistricting cycle. Which is fairly high.
- Q And briefly, if we could go over to Defendant-Intervenors' actually, sorry, I shouldn't leave that just yet. Can we pop back over to the table.

I want to focus in for a minute on the number for HD 63. Am I correct in saying that is 82.1 percent core retention?

- A Yes.
- Q Okay.
- A Yes.
- Q So then bringing up Defendant-Intervenors' Exhibit 94, [621] page 1. This is in the exhibit book, the witness' exhibit book here, but it's also in Map Book 1 if you would like to have a bigger physical copy with you.
 - A I can see it. Thank you.
- Q I think everyone has found it. Professor Hood, I believe you were in the courtroom when we looked at these earlier with Delegate Jones and some of the other witnesses?
 - A Yes.
- Q So you are generally familiar with what these maps show?
 - A Yes.
- Q And I won't belabor the point, but just that the parts in yellow are the 2011 district?

- A Yes.
- Q And the parts that are in hatching and gray are the parts that were removed from the district as between the benchmark plan and the 2011 plan?
- A Yes. The parts that are hatch marked without yellow underneath, yes.
- Q So looking at this particular district as an example, it looks like a lot of the territory geographically was removed from the district, is that correct?
- A I couldn't give you a percentage, but geographically these southern VTDs, yes, were removed from that district.
- [622] Q And we just looked at on your chart that the core retention of this district was 82.1 percent. Which seems rather high.

Could you explain to us how that works?

A Again, the core retention measure is a measure of where populations are moving. The map is more a way of looking at geography.

Now, we could code a map to show population density. This is not coded for that. But I have to constantly remind myself when looking at a map that population is not necessarily equally dispersed across the map unless the map is coded to show us that or not.

So it would tell me that these southern VTDs here didn't contain a whole lot of population because this member was able to retain again about 82 percent of their constituents.

Q Thank you. I think we will go back to your –

JUDGE PAYNE: Are you basically saying that your understanding is that the counties or the precincts – VTDs, excuse me, that were cut out were basically not populated? They are among the ones that were either unpopulated and removed or didn't have much population, is that what you're saying?

THE WITNESS: Well, from looking at the core retention number and looking at the map, Your Honor, I [623] would have to infer that those VTDs that were removed didn't have a lot of population.

JUDGE PAYNE: Okay.

BY MS. WALRATH: (Continuing)

Q Okay, going back to your report, which is Defendant-Intervenors' Exhibit 15. And just one final thing on Table 10 to finish it out.

Looking at the last column there, entitled Incumbent Paired, what does that show the Court?

- A That just shows that there were no incumbents representing the challenged districts that were paired against another incumbent by the enacted redistricting plan. That's what no means in that case.
- Q Okay. So is there any conclusion we can draw about that as to incumbency protection?
- A Well, obviously, if you are an incumbent paired against another incumbent, you're going to be in for a fight.

So the idea in terms of an incumbent protection plan would be not to be paired against another incumbent.

Q And I won't pull them up on the screen, but we did discuss the 2011 criteria and the communities of interest.

Is it fair to say that with respect to the challenged districts, that what we've looked at shows that the plan takes into account things like political beliefs, voting [624] trends, and incumbency considerations?

A Yes.

Q Are there any notable differences in the challenged districts versus the plan overall, in your estimation?

A Well, I mean, obviously, they are majority black districts. So that would be one difference.

None of the, none of the incumbents in the challenged districts were paired. And they all had higher core retention than the average district.

So there may have been a little bit more emphasis on incumbent protection in these districts.

 \mathbf{Q} $\$ We are going to turn now to page 17 of your report in section VI.

What did you evaluate in this section of your report?

- A This was a legislative roll-call analysis that I performed on the floor vote for HB 5005.
- Q Maybe it will help if we pull up on page 18, Table 11.

And just quickly for the record, I know on the top of this table it says HB 5005, and on the left it says HB 5001.

Should be that 5005?

- A Yes. I apologize, that is a typo. The heading is correct. This is the vote on HB 5005.
- Q And what does this table shows with respect to the vote on HB 5005?

[625] A I know some of this has been discuss previously, but this just sort of encapsulates everything into a chart that there was really overwhelming bipartisan support for HB 5005. Overall, just about 90 percent of members voted in favor. 100 percent of Republicans. Just under three-quarters of Democrats. Just under 85 percent of black Democrats. And there were two unaffiliated members in the House that also voted for this. So 100 percent of the unaffiliated members.

- Q Am I reading this correctly that there were only nine votes against the plan?
 - A Nine total votes against the plan, yes.
- Q And just, we won't pull it up, but looking at Table 12 on page 19, this looks like it is upon final adoption.

Was this vote essentially the same as the initial adoption vote that we just looked at?

A Yes. That was, Table 12 gives the final adoption. And the numbers are very, very close to those for Table 11, 90 percent overall for the bill, 100 percent of Republicans, 75 percent of Democrats, and 90 percent of black Democrats.

JUDGE PAYNE: Should HB 5001 be 5005 in Table 2 as it is in – in Table 12 as it is Table 11.

THE WITNESS: Yes, Your Honor. I was at least consistent in making the mistake.

[626] JUDGE LEE: They call this practice for a reason.

THE WITNESS: Yes, Your Honor.

MS. WALRATH: Next time it will be perfect.

BY MS. WALRATH: (Continuing)

Q So turning to page 19, the section VIII entitled Election Analysis.

Actually let me ask you first, is what happens in elections useful to determining anything regarding the drawing of a plan?

- A Yes. Certainly after an election occurs we can often times look back on things and perhaps get some incite into what was going on when the plan was being drawn up.
- Q Is that what you are looking at in this section of your report?
- A Yes. I am looking at the election cycle that occurred right after enactment of HB 5005.
- Q If you pull up Table 13 on page 19 of your report, what does this table show?
- A It basically shows from 2009 to 2011, which is the across the redistricting cycle, this table just simply shows that the number of Republican seats increased, the number of Democratic seats decreased, and the number of Independent members went from two to one.
- Q And so, if we flip to the next page, Table 14, what does this table show?
- [627] A This Table 14 shows a little more detailed breakdown of Table 13. Here by race of the delegate. And so, we can see what happens in terms of by race of the delegates in terms of who is winning these seats across these election cycles.
- Q Is there any conclusion that we can draw from this table?

- A Well, the number there are a couple. The number of black House of Delegates members remains the same across the redistricting cycle at 13. The number of Hispanic House of Delegates members goes from zero to one. And the number of Asian House of Delegates members goes from one to two. And the number of Democrats, overall the number of white Democrats decreases from 26 percent to 17 percent.
- Q And why did these Democratic seat losses occur?
- A Well, I think we may need to talk about some subsequent tables to flesh that out.
- Q Of course. I will move on to Table 15 on page 21 of your report. There are two tables here, but we'll start with 15 and then move on to 16. We might bring them up together here.

So first with Table 15, can you explain what these tables are showing.

A Sure. I hope they are simple enough. What I have [628] done is taken my Democratic vote average and divided it up into quartiles. So 0 to 25, 25 to 50, 50 to 75, and 75 to 100 percent.

And then I've also categorized seats by the party holding the seat.

So this is what things looked like after the redistricting but just prior to the election based on the party holding the seat at that time.

And so, if I could – a couple of points to make about this particular table. And that is that no Republican member at that time was in a district where there were a majority of Democratic partisans. That's why the cells in the 50 to 75 percent range and the 75 to 100 percent range are zero. So –

- Q So looking at this and looking at the 25 to 50 percent quartile, it says there is 58 members there, is that correct?
- A Right. So those members were in a district that had less, obviously less than a majority of Democratic partisans. So by definition, they had a majority of Republican partisans. As to that one member over there in the 0 to 25 percent range.
 - Q A very safe seat.
 - A Yes. So that would be an extremely safe seat.
- Q Looking at the Democrat line, what does that show [629] about the same types of numbers?
- A Well, there were 28 Democratic held seats at that time that were in districts where the Democratic vote share was 50 percent or greater. So 26 plus two there.

There were 11 Democratic seats though that were in more marginable seats. They were in the Democratic vote share of 25 to less than 50 percent, those 11 that are there in bold.

And so, they are certainly in more marginal seats in terms of partisanship.

- Q Okay. So if we turn to look at what happened after the election then in Table 16.
- A So Table 16 shows the same thing, but after the election occurs.

And what we see, again, is a drop in the number of Democratic held seats in that marginal range of 25 to less than 50 percent. Now there are only four. So it goes from 11 to 4.

And as well, one of the Independent members also in that DVA range also drops out. So we go from two Independents in those marginally held Democratic seats to one.

Q And I think you testified earlier about the fact that there was some lost seats in the Democratic party.

Does this quartile here, this 12.5 percent, four [630] seats, remain? Is there any relationship between that number and the number of seats lost?

- A Well, from the 11 to the four, yes. Yes. So the 11 up above in Table 15 to the four here, yes. So I definitely think there is a relationship here, a correlation between Democrats holding more marginal seats in terms of Democratic partisanship and Democratic losses in the 2011 election cycle.
- Q And turning to the next page of your report here, page 22. This is the last section entitled Overall Opinion.

So as the title suggests, what is your overall opinion of the plan, including the challenged districts?

A Okay. Well, I guess I could back up and just say in relation as well, that none of the incumbents in one of the challenged districts lost, obviously, in 2011. So they were all retained.

So overall, looking, comparing the benchmark plan to the enacted plan and being able to look at the plan over at least one election cycle, there seems to be a fair degree of incumbency protection going on in these plans by just the very low number of incumbents that are paired, the high core retention figures.

Secondarily, you know, again, it appears that Republican voting strength was a little more

concentrated [631] in some districts. Democratic voting strength was a little more dispersed. That seems to have created a number of Democratically held seats that were a little more marginal. And all of those seats, I may not have stated this, but all those seats were held by white Democrats, which I believe in part at least led to some Republican seat pick ups in the 2011 election cycle.

Other things we could say, for instance, about the plan as a whole, excuse me, is that, you know, it did accomplish the goal of going from plus or minus 2 percent deviation in the previous cycle to plus or minus 1 percent deviation in terms of population in the next cycle or in the enacted plan.

- Q And speaking of that, Professor Hood, are you aware of any alternative plans to HB 5005?
 - A Yes.
- Q And turning to your, back in your report a little bit, to page 21. Looking at footnote footnote 19.

Does this footnote refer – well, it is kind of small, but does this footnote refer to those alternative plans?

- A Yes.
- Q And it looks like you're saying here that there were 23 incumbent pairings in one plan and one in 26 or one contained 16, excuse me?
 - A Yes, that's what the footnote says.
- [632] Q Does this mean at minimum 46 and 32 members respectively were paired in those plans?
- A At a minimum. And that would be assuming that just one incumbent was paired against another incumbent. It is always possible to have more than

that paired against one another. Maybe three, for instance.

- Q And in your opinion on that basis alone, would either of these plans have met the criteria adopted by the House that we were looking at before?
- A No, I don't believe so. Not certainly in terms of incumbent protection.

And not only that, of course, these are pieces of legislation, and it would be very hard to pass a piece of legislation I think that had that many incumbents paired against one another because, of course, these are the members voting on that piece of legislation.

Q I would like to turn now – I mentioned earlier Dr. Ansolabehere's, hopefully I pronounced that close to correctly, reply report, which is Plaintiffs' Exhibit 51. He makes on a number of occasions claims that you agree with him or don't dispute some areas. I would like to just discuss a few of those.

So if we could turn first to page 4 of Exhibit 51, paragraph 9. And for the sake of brevity, I would like you to read the paragraph. I will paraphrase for the [633] Court, but please do read it in its entirety.

- A Would you like me to read that?
- Q Yes, please. Well, read it to yourself. While you are doing that, I will –

JUDGE PAYNE: What page?

MS. WALRATH: Page 4.

JUDGE PAYNE: Page 4, I'm sorry.

MS. WALRATH: Page 4, paragraph 9.

BY MS. WALRATH: (Continuing)

Q Where he states that you and he are in agreement that there were minimal changes in the Democratic vote share of the challenged districts.

Do you agree?

A Well, again, we were using different measures of Democratic vote strength. I explained my index, and it did differ from Professor Ansolabehere's.

But by my index again, looking back at, it was Table 10 in my report, yes, using my index, the Democratic vote average went from 68.3 to 67.6. So I would call that slight.

Q I am trying to stay on the same subject here. If we turn to page 18, paragraph 53. He says that Professors Hood and Katz have offered assessments of party performance, and that they are at odds, that you and Dr. Katz are at odds over the sorts of elections to be [634] examined.

Are you at odds with Dr. Katz?

- A I don't believe so, no.
- Q And why not?
- A Well, I was calculating my measure was calculated to be a proxy for Democratic voting strength or Democratic partisanship in the legislative districts.

From Professor Katz' report and what he testified to today, he was performing a different type of analysis.

Q In looking right to the next page, page 19, in paragraphs 56 and 57, he points out again that you argue that there is no change in the average partisanship of the districts. And that your Table 10, that there is no appreciable change in the Democratic performance in the challenged districts between 2009 and 2011.

And he goes on to say that that analysis, although using different elections than he chose, comports with his conclusion that party was not an important factor in the configuration of the challenged districts.

Do you agree with that?

A I don't think I ever stated that party was not an important factor, for one thing. Again, if you just look at the average scores, there is not a lot of change. If you look at the scores across all districts though, and again I'm talking about my Democratic vote average, in [635] Table 5 – I mean, the means don't change all that much, that's true, but there are again, as I stated, looking at my before and after election analysis, you know, in terms of the variability, there is more variability across Democratically held districts than across Republican districts.

So there are difference across the election cycle.

Q And then turning back to page 4 of Exhibit 51, look at paragraphs 10 and 11.

Dr. Ansolabehere talks about how he provided a correlation of analysis and the racial partisan composition of VTDs and the likelihood that a VTD was or was not included in a challenged district, and says that you do not dispute his analysis about the VTDs.

Is that correct?

- A Well, I did not perform that analysis.
- Q Does that mean that you agree or disagree with his analysis?
- A I don't necessarily agree with it. I don't have a basis to analyze it. I didn't perform the same kind of analysis.

Q And turning to page 15, paragraph 44. Dr. Ansolabehere acknowledges that you examined VTD splits on a statewide basis, but says that you offered no analysis of the challenged districts.

[636] Is that accurate?

- A Well, I provided an analysis for the challenged districts on certain criteria. I did not look at that particular criteria, no.
 - Q And why not?
 - A Just I didn't think it was germane.
- Q Is there any reason why a statewide analysis is better?
- A Well again, I think part of the issue overall is that, you know, districts are not drawn in isolation from another one. It's part of a total plan, in this case drawing 100 districts to represent the State of Virginia. And that's one of the reasons I did an analysis primarily of the entire benchmark plan versus the enacted plan.
- Q In looking at paragraph 45 on the same page, he addresses your analysis of the divided counties or independent cities and notes that well, I should probably just read this instead of trying to paraphrase since I am not an expert.

He says, "He offers no analysis of the challenged districts. In my analysis of the challenged districts, I found an increase in the number of split counties from 17 to 19 and the number of divisions of counties created from 29 to 33. Hence, even though the state as a whole was unchanged by this measure, the challenged districts [637] witnessed an increase in geographic divisions." Is that accurate?

- A That's an accurate reading of that paragraph, yes.
 - Q Oh, I apologize. Do you agree with that?
- A Not necessarily. Again, I think it's important to look at the challenged districts within the districting plan as a whole.
- Q And looking at paragraph 46, it is a similar statement about the number of VTD splits in the benchmark VAP versus the HB 5005. He says that there is no justification offered for the increase in split VTDs.

Is that accurate?

A Well, I certainly just offered a justification here. And that is again, if you're going from plus or minus 2 percent population deviation to plus or minus 2 percent, you're probably going to increase the number of VTDs that may have to be split.

And again, across the state, we're talking about a very, very small increase in the number of VTD splits from the benchmark to the enacted plan.

Q And briefly, I would like to go to Plaintiffs' Exhibit 16 again. And this time I would like to go there to look at a particular sentence. This is the 2011 criteria that we discussed earlier.

I'm going to look specifically at the last sentence of [638] Section V, which says, "Local government jurisdiction and precincts lines may reflect communities of interest to be balanced, but they are entitled to no greater weight as a matter of state policy than other identifiable communities of interest."

I think we talked about this earlier, are VTDs the same as precincts?

- A Not necessarily, no.
- Q And so, do read this criteria as giving any particular importance to splitting or not splitting VTDs?
- A It doesn't seem to be referring, in my opinion, to VTDs, no.
- Q And going back to Dr. Ansolabehere's reply report, Exhibit 51. I would like to go to page 18, paragraph 53.

Actually, we already did this one, I apologize. Losing myself in my own pace here.

Let's go to page 8, paragraph 26. I'm looking at paragraph 26. Dr. Ansolabehere references yourself and your compactness report measures for the Commonwealth under the benchmark map in HB 5005, and states that you do not offer an average compactness for the challenged districts with respect to the remainder of the state, and that you offer no evidence contrary to his conclusions that using his measures, the challenged districts are on average less compact than the remainder of the state.

[639] Do you agree with him?

A Well, I didn't provide those comparisons, no. I compared average compactness of the challenged districts before and after or across the redistricting cycle, and I compared the entire state, all 100 House of Delegates districts before and after the redistricting.

So I didn't provide that comparison, I didn't view that, what he is describing, as being the more apt comparison.

- Q Does this mean anything in particular to the Court?
 - A I wouldn't compare things in this manner.
 - Q And why not?
- A I just don't think it's the best way to compare things, again.
- Q And looking at the next paragraph, paragraph 27, looking at the analysis that you did do of compactness. He says that your analysis agrees with his analysis that HD 74, 75, and excuse me, 74, 77, and 95 have certain Reock scores and that the average compactness in the 12 challenged districts was decreased from the benchmark map to 5005, and listed those districts that experienced substantial reductions in compactness.

Do you agree with him?

A Again, I can agree with parts of that. The average compactness score for the challenged districts does drop [640] slightly across the redistricting cycle. We went over that previously.

Again, compactness in some of the challenged districts goes up and in some of them they go down.

- Q And did any other districts in the rest of the plan experience similar reductions in compactness? And by any other districts I do mean non-challenged districts.
- A There were other districts statewide that had low compactness scores as well.
- Q And just briefly turning to page 10, paragraphs 32 and 33. If you could read them to yourself.

It looks like he is making similar points that he did in paragraphs 26 and 27. Does that sound right?

A Yes. I guess I would quibble with maybe some of the adjectives he uses. You know, we went over the mean – let me just flip back here real quick.

So here we're talking about Polsby-Popper. Again, the mean for the challenged districts goes from .23 to .19.

So, yes, you could say the compactness scores go down, that's true. I don't know that on average that's a huge drop.

- Q Is there any way that you would characterize it?
- A There is a slight reduction in compactness for the challenged districts across the two plans.
- Q And finally, if we could turn to page 34. This won't [641] be the last one, but it is the last topic. Looking at paragraphs 92 through 94.

He is talking about his racial voting patterns analysis. And can you please read paragraphs 92 and 93 to yourself.

A Okay.

Q And in paragraph 94 he states that you do not dispute his analysis or the conclusions derived therefrom.

Do you agree with that?

- A Well, for one, I did not perform a racial bloc vote analysis or a vote dilution analysis for this particular report. I don't necessarily agree with his findings or the way he conducted that analysis.
- Q And if you had been asked to do the analysis, would you have done it differently?

- A Yes.
- Q How so?

A Well, some of the things have been discussed today already. I would have – again, I would have relied on a closer look at the endogenous elections. So the actual House of Delegates elections versus other types of elections or exogenous elections that are going on.

Typically if this were a sort of Section 2 vote dilution analysis, those would be more probative. Endogenous elections that is –

[642] JUDGE KEENAN: Excuse me, sir, could you keep your voice up a little bit.

THE WITNESS: Yes, Your Honor.

JUDGE PAYNE: Pull that microphone closer. Are you saying endogenous?

THE WITNESS: Endogenous, yes, Your Honor.

JUDGE LEE: Meaning House elections?

THE WITNESS: Yes, yes, Your Honor.

BY MS. WALRATH: (Continuing)

Q And real quickly also -

JUDGE LEE: You just gave one answer. Were you finished?

- A Not quite.
- Q Go ahead, please.

A You know. Again, I would also have relied on primary elections as well. It's very common to look at primary elections if you're trying to determine the minority preferred candidate. Sometimes those candidates are found in primary elections.

And I would have used as many election cycles as possible, probably over something like a ten-year period typically, to try to get a handle on that particular issue.

Q And on that subject as well, Professor Hood, have you ever been asked by a state legislature or a municipality [643] to do a racial bloc voting analysis during the drawing or enactment of a plan?

A No.

Q Then turning to page 42 of Dr. Ansolabehere's reply report here, Exhibits 1 – excuse me, paragraphs 115 to 116. If you could please read paragraph 115 to yourself.

A Okay.

Q And just briefly, he references his ability to elect analysis and his conclusion that in none of the House of Delegates districts was a 55 percent threshold necessary to have an expected vote in excess of 55 percent. This is a number we have been hearing a lot about.

And then in paragraph 116 he says that you do not dispute that analysis.

Do you agree with his conclusion?

- A No. Again, I didn't perform that type of analysis. It doesn't necessarily mean that I agree with his conclusions, certainly.
 - Q And is there any particular reason why not?
- A Well again, for some of the reasons we just discussed, I would have performed the analysis differently from what Professor Ansolabehere did.

MS. WALRATH: I have no further questions at this time.

JUDGE PAYNE: Cross-examination.

[644] MR. HAMILTON: Your Honor, Mr. Spiva is going to do the cross-examination. I rise just to raise a question about logistics because it's 4:30 and we're running short on time.

We have a rebuttal witness that we intended to call just to lay the foundation for those two documents, Gerry Hebert. He is not available on Monday. So if we're not going past 5 o'clock, we would ask the Court's leave to interrupt the proceeding for a very brief witness to lay the foundation to admit those two documents in a rebuttal case out of turn.

JUDGE PAYNE: Any objection?

MR. BRADEN: Your Honor, we object to his production. He was not noticed as a rebuttal witness.

JUDGE PAYNE: He was not noticed as a witness in your 26 disclosures or in any of the witness lists, is that right?

MR. HAMILTON: Well, of course not, Your Honor, because he is a rebuttal witness.

JUDGE PAYNE: Yes.

MR. HAMILTON: We didn't know we needed him until literally today when there was this issue. And as Your Honor will recall, you said, you know, move on, lay a foundation, and if you can do that, then you can get them in your rebuttal case.

[645] That's exactly what we intended to do. I reached out to Mr. Hebert, he is a former acting Chair of the Voting section of the Department of Justice. I

anticipate his examination will consist of about ten questions at most.

JUDGE LEE: From you, but then there will be cross-examination.

MR. HAMILTON: True, but given the scope, there is not going to be much.

JUDGE LEE: Well, I am not sure what you expect us to do. If the defense won't allow this witness to step down and complete his testimony before you start cross,

I'm not – I guess we could force him to do it. I am not sure that I would.

JUDGE PAYNE: I wouldn't be inclined to force him do it. Just have him come on Monday.

MR. HAMILTON: See, that's the problem, Your Honor. I wouldn't even ask for this, but Mr. Hebert is not going to be in the Commonwealth on Monday and he is not available. I suppose we could take his deposition –

JUDGE PAYNE: Take his deposition over the weekend and do it that way then.

MR. HAMILTON: All right. Thank you, Your Honor.

JUDGE PAYNE: That's the way that you do it usually, isn't it?

[646] MR. HAMILTON: It is a pretty unusual situation. I am happy to take his deposition over the weekend.

JUDGE PAYNE: That will be fine.

MR. HAMILTON: Okay, thank you.

CROSS-EXAMINATION

BY MR. SPIVA:

- Q Good afternoon, Dr. Hood. Good to see you again.
 - A You as well.
- Q I am going to try to be brief. Actually, Ms. Walrath may have covered a number of the questions I had for you, but I just want to make sure that I am clear.

You understand that one of plaintiffs' allegations in this case is that the defendants engaged in racial gerrymandering in the drawing of the 12 majorityminority districts?

- A Yes, that's the allegation, yes.
- Q And if I refer to those as the challenged districts, you understand what I am talking about?
 - A Yes.
- Q Okay. And you have performed no analysis of whether any of the 12 challenged House districts need to have a black voting-age population of 55 percent or greater in order to preserve the African-American community's present ability to elect its preferred candidate of choice, is [647] that correct?
 - A That's correct.
- Q I know that was a mouthful. And similarly, you have not performed any analysis on whether any of the 12 challenged House districts needs to have any particular BVAP percentage in order to preserve the minority community's present ability to elect their candidate of choice, correct?
 - A Those two questions seem pretty similar.

- Q They are similar. The first one was about 55 percent, the second one was about whether you had done any analysis in terms of any percentage, whether it is 55 percent or anything else?
 - A No, I have not performed that type of analysis.
- Q Okay. And you would agree with me, Dr. Hood, that as a general matter that there is no set BVAP percentage required for an African-American community to elect its candidate of choice, correct?
 - A It could vary greatly.
- Q Right. There is no rule of thumb to be applied to all majority-minority districts in all places, correct?
- A Well, if it's a majority-minority district, there is one rule at least.
 - Q What's that one rule?
 - A It has got to be 50.01 percent.
- [648] Q Other than that rule, would you agree that there is no rule of thumb to be applied in all places?
 - A There is no strict rule, no.
- Q Okay. And certainly no rule of thumb that would apply for all time, would you agree with that?
 - A Things are not necessarily time bound, no.
 - Q That percentage may vary –
 - A Things can change.
 - Q I am sorry, I didn't mean to step on your-

JUDGE PAYNE: Be careful, you're stepping on each other.

Q Yes, and it is my fault, Your Honor. I apologize, Dr. Hood. Please, you answer.

- A Things can certainly change over time, that's possible.
- Q And it might vary based on the degree of racially polarized voting, if any, would you agree with that?
- A Well, certainly that's one consideration, yes. The voter cohesion amongst different minority groups compared to the majority group, yes.
- Q And it might vary in a state, let's take Virginia, from place to place within the state, would you agree with that?
 - A It's possible, yes.
- Q Some parts of the state may have high degrees of [649] racially polarized voting and others may have lower levels, is that correct?
- A Well, we're speaking just hypothetically here at this point. I have not conducted any type of subregional analysis in the State of Virginia on that particular question.

It's possible it could vary. It's possible racial polarization could be fairly constant across the state as well.

- Q You would have to do a racially polarized voting analysis to figure that out, wouldn't you?
 - A That's fair, yes.
- Q And you've done that type of racial bloc voting analysis previously, isn't that right?
- A Yes. Maybe I sometimes use the term "vote dilution analysis." I'm assuming we're talking about the same thing. Trying to determine how one racial group is voting and how another racial group is voting,

and what kind of effect that is having on the election, is that fair?

- Q That's fair.
- A Okay.
- Q And you have done that type of analysis before, correct?
 - A Yes.
- Q Okay. And I take it in the analysis that you did do, [650] Dr. Hood, you didn't interview any of the particular delegates in the challenged districts, is that correct?
 - A That's correct, yes.
- Q And you didn't consider any statements by delegates on the House floor, is that correct?
- A Not directly. I saw some of the testimony, some of the video testimony.
- Q Oh, okay, all right. Did you consider that testimony in forming your opinion?
- A It really didn't go to forming my opinion. Again, the primary purpose of my report was a comparison from the benchmark plan to the enacted plan.
- Q Now, you would agree with me that prior to the 2011 redistricting, three of the challenged districts had lower than 55 percent BVAP, correct?
 - A Well, I could look in my report.
- Q Sure, if you want to look, it is Defendant-Intervenors' Exhibit 15, and it's at page 13, Table 8, I think you will find that information.

And it should be in your witness book too because I think Ms. Walrath went over it with you.

- A Okay.
- Q So the question was, Dr. Hood, that you would agree with me that prior to the 2011 redistricting, that three challenged districts had lower than 55 percent BVAP, is [651] that correct?
 - A Yes, that looks to be accurate.
- Q All right. And the map drawers of the 2011 map, they raised the BVAP in each of those three districts above 55 percent in the 2011 redistricting, that's true too, isn't it?
 - A 71 went from 46.3 to 55.3.
 - Q Maybe take a look at 89.
- A 80 from 54.4 to 56.3. And 89 went from 52.5 to 55.5.

So, yes, that would be an accurate answer to that question.

Q All right. Thank you, Dr. Hood. And you anticipated my next question. So I will move on to another one.

The map drawers did not lower the BVAP of any of the challenged districts below 55 percent, is that correct?

- A With the enacted plan?
- Q Correct. With the enacted plan, they did not lower the BVAP of any of the challenged districts below 55 percent?
 - A That's correct.
- Q Okay. Now, you've opined, Dr. Hood, that African-Americans were not packed into the 12 challenged districts, isn't that right?

A Well, I think I only used that term in reference to Democratic partisans.

[652] Q Actually, can you take a look at your report, I think it's in the same exhibit there, Defendant-Intervenors' Exhibit 15 at 13. And the text there, I believe you say closer examination of Table 8 refutes the idea that the new plan packed the black voting-age population into districts.

Do you see that?

- A Okay, yes.
- Q Okay. That's your opinion, isn't it?
- A Yes, as is stated there.
- Q And this is based in part on the fact that the average BVAP across all 12 challenged districts increased by only .1 percent, is that correct?
- A That's part of it. I also make reference in the same paragraph to the fact that the plan reduced the concentration of blank Virginians in the most heavily black districts, the ones that were more than 60 percent.
 - Q Okay.
- A So I guess that gets back also to that graphic I showed that black voting-age population went up in some districts and went down in the some of these districts.
- Q But you didn't do any analysis of any of those districts to determine whether the BVAP after the redistricting was necessary to protect the African-American community's present ability to elect [653] their candidate of choice, correct?
 - A No, I did not perform that type of analysis.

- Q Okay. And so, you do not know whether the African-American community in any of those challenged districts could have elected could have had the ability to elect the candidate of their choice with a lower BVAP percentage than that chosen by the map drawers, is that fair?
 - A Yes. Again, I did not perform that analysis.
- Q You have opined in your report that the ability of black Virginians to elect their preferred candidates was retained by the new 2011 plan, is that correct?

And if you want to verify, just take a look at page 20, I think it's the sentence right before Table 16.

- A Well, that would be yes, I did make that statement. That's in reference to this election analysis I performed that showed that all the incumbents from the challenged districts were returned.
- Q Okay. But you would agree that black Virginians in the challenged districts had the ability to elect their preferred candidates prior to the new 2011 plan, isn't that right?
- A Well, I think to make that statement definitively I would have to make that statement, I would have to perform an analysis looking at that time period.
- [654] Q And that's an analysis that you have not done?
 - A Yes. I said I didn't do that. So -
- Q Okay. And were you aware that every single delegate representing a challenged district in 2009 was re-elected in 2011?
 - A Yes.

- Q Okay. And every single delegate representing a challenged district after the 2000 elections had been first elected either in 2009 or earlier, isn't that right?
- A I would have to look that up to be honest with you.
 - Q You don't know the answer to that?
 - A I don't know the answer to that.

JUDGE PAYNE: Hold on a minute.

COURT REPORTER: Your Honor, I heard him say 2000.

Q Oh, let me get you the exact question. Actually, what I said was every single delegate representing a challenged district after the 2011 elections had been first elected either in 2009 or earlier. Sorry, thanks.

In calculating Democratic vote average, you used election data from the statewide races for governor, I take it, is one of the statewide races that you used?

- A Governor, lieutenant governor, and attorney general, yes, from the 2009 election cycle.
- Q Okay. Thank you. Those were going to be my next [655] couple questions, so you covered it.

Can you take a look at page 15 of your declaration. And you opined on page 15 that the political composition of the challenged districts stayed about the same before and after redistricting, is that correct?

- A Well, again, if you look at the means for those districts as a whole, yes, there was little movement.
- Q Right. In fact, in looking at the second sentence from the top, you find that, "From 2009 to 2011 the partisan composition of these challenged districts was essentially unchanged."

That's your opinion?

- A Yes.
- Q Okay. And the average Democratic vote average in the challenged districts went from 68.3 percent in 2009 to 67.6 percent in 2011, is that correct?
 - A That's correct.
- Q So on average the challenged districts got a little less Democratic, isn't that right?
 - A Just slightly, yes.
- Q And you conclude in fact that the new plan did not seek to pack Democratic voters in these districts, isn't that right?
 - A Yes. Looking at that statistic, yes.
- Q And you did not do any analysis of the extent to which [656] changes in any particular challenged districts district, I'm sorry, was driven by politics, correct?
 - A Could you -
 - Q Say it a little slower. Sorry.
- A No, I got the question. I mean, I guess could you give me an example.
- Q No, I don't have an example. I was just saying I was asking, you did not do any analysis of the extent to which changes in any particular challenged district was driven by politics? You didn't do that analysis?
 - A Correct.
- Q All right. And you wouldn't claim and it's not part of your opinion that any specific change was made to any specific challenged district based on partisanship, correct?

A Correct. I didn't perform an analysis at that level.

Q For HD 75 – strike that.

You would agree that all but one of the challenged districts was underpopulated according to the 2010 census, correct?

A Yes.

Q Let me ask you to turn to Plaintiffs' Exhibit 50, which is the initial expert report of Dr. Ansolabehere.

JUDGE PAYNE: What page?

MR. SPIVA: It is Table 4 on page 72, Your Honor.

[657] And also, Dr. Hood, it's Table 4 on page 72 that I wanted you to take a look at, please.

JUDGE PAYNE: I think it's also up on the screen, Doctor.

MR. SPIVA: Yes, it's also on your screen, Dr. Hood, if you want to look there.

THE WITNESS: Okay.

BY MR. SPIVA: (Continuing)

Q And you see that this has the population and racial composition of the challenged districts in the benchmark plan and in the new plan, HB 5005, is that correct?

A Yes.

Q And you see that HD 74 was very close to the ideal population under the benchmark plan, correct?

A Yes, that's close, yes.

Q Can you take a look at, and I believe we can put it up on the screen, at Table 5, which is on the next page, page 73.

And you see that this table shows the numbers of people moved into and out of each challenged district as part of the 2011 redistricting, correct?

A Yes.

Q And you'll see that the map drawers removed 16,414 people from District 74 even though its population was very close to ideal, correct?

[658] A Correct. According to this table, yes.

- Q And you don't know and you don't have an opinion on why the map drawers removed over 16,000 people from District 74, correct?
- A Well, besides the fact that, again, I can just state generally that altering one district, of course, has or can have a ripple effect on surrounding districts.

So we heard testimony earlier to the fact that, you know, in some areas a number of districts were underpopulated. And so, not only that, but there are many considerations with drawing district boundaries. And there may have been, you know, a perfectly valid reason for removing some of the population and then moving population from other geographic areas into that district.

Q I appreciate that, but actually I have a narrower question.

A Okay.

Q Which is that you have not looked at, and so, therefore, you have no opinion on the reason for removing 16,414 people from District 74, isn't that correct?

- A I did not do an analysis like this, no.
- Q Okay. And turning back to Table 4. You see that HD 70 was also close to ideal under the benchmark plan.

Do you see that?

A Yes, yes.

[659] Q And if you would look at Table 5, and we will put that up on the screen again – sorry, we're going to have to do a little flipping back and forth just for a minute.

You have see the map drawers took almost 26,000 people out of HD 70, correct?

- A 25,946, yes.
- Q Almost exactly 26,000, right?
- A Yes.
- Q Just a little below. And you haven't done an analysis and have no opinion as to why 26,000 people were removed from District 70 even though its population also was close to the ideal population prior to redistricting?
 - A I can't comment specifically, no.
- Q Okay. And we could go through a few more, but I take it the answer would be the same, with respect to any individual district, you can't opine on why population was moved out or moved into any of these particular challenged districts?
 - A Correct.
- Q Okay. And you don't draw any conclusions in your opinion concerning whether the map drawers sacrificed compactness in any of the challenged

districts in order to attempt to comply with the Voting Rights Act?

A I don't draw any conclusions specifically on that point, no.

[660] MR. SPIVA: Okay. Thank you, Dr. Hood, I appreciate it. I have no more questions.

JUDGE PAYNE: Any redirect?

MS. WALRATH: I have a few questions.

REDIRECT EXAMINATION

BY MS. WALRATH:

Q Given the time, I will keep this very brief.

Professor Hood, I would just like to turn briefly back to your report, Defendant-Intervenors' Exhibit 15, and your Table 8. It is on page 14 of the trial exhibit stamped page numbers.

JUDGE PAYNE: What exhibit?

MS. WALRATH: Defendant-Intervenors' 15.

JUDGE PAYNE: His report?

MS. WALRATH: It is his report, yes. Page 14, Table 8.

BY MS. WALRATH: (Continuing)

- Q And I believe you testified to this earlier, but just for the sake of reminding everyone, what is the source of the numbers in this table for the black voting-age population?
 - A These are DLS numbers.
- Q So as between the discussion I think you have heard in this courtroom, there is DLS numbers versus a DOJ number, [661] this is the DLS numbers?

- A Yes. Yes.
- Q And in this report I think we just heard you testify that the black voting-age population of many of these challenged districts was largely unchanged, is that correct?
 - A Well, are we going district by district?
- Q No, as a general proposition for the drawing of districts.
- A Yes, if look at the averages there, 57.1 percent in the benchmark plan versus 57.2 percent in the enacted plan.

So, yes, I would call a tenth of a percentage point hardly any change at all.

- Q And similarly, when we were speaking about the Democratic performance of these districts, I believe that was largely unchanged as well?
 - A Yes, that is accurate.
- Q And isn't there in your opinion a correlation in Virginia between race and politics?
- A Yes. There is a correlation in most of the South between race and politics, certainly.
- Q And finally, we don't necessarily need to bring this up on the screen, but we discussed the 2011 criteria previously?

[662] A Yes.

- Q And that you had had a chance to review the criteria?
 - A Yes.

Q And in your opinion, are the challenged districts in any way in conflict with the communities of interest in any of the criteria that you evaluated in your report?

A I don't believe so, no.

MS. WALRATH: Thank you. I have nothing further.

JUDGE PAYNE: May he be excused?

MS. WALRATH: Yes.

JUDGE PAYNE: I don't see any reason why at this juncture – you have got another witness, Mr. Braden?

MR. BRADEN: Yes, we do, Your Honor.

JUDGE PAYNE: I don't see any reason why at this juncture we couldn't let that fellow come testify since he is not interrupting a witness.

JUDGE LEE: Well, the problem is that cross-examination would have to occur. And if he is not – and we're not going to be here until 6 o'clock because I have a docket tomorrow.

JUDGE PAYNE: Why do you need – can't you stipulate to authenticity? That's all you're going to do, isn't it, Mr. Hamilton, with this witness, is the authenticity? Yes or no?

MR. HAMILTON: Yes.

[663] JUDGE PAYNE: Okay. Will you stipulate the authenticity or –

JUDGE LEE: Can you come to the podium, Mr. Hamilton. What is it you have?

JUDGE PAYNE: Why do you have ten questions?

JUDGE LEE: What is it you have?

MR. HAMILTON: We have two documents, Your Honor. One of them is a letter from Senator McEachin

to the Department of Justice in connection with the preclearance of the Senate plan in 2011.

And the second is an e-mail from Mr. Hebert, who was then a private attorney representing Senator McEachin and the black caucus in the Senate providing a racially polarized voting study in connection with the preclearance to the Department of Justice.

It is simply to prove the point that in fact in Virginia racially polarized voting studies have been done and have been submitted to the Department of Justice in connection with preclearance. It is a simple point.

And so, if they will stipulate to authenticity –

JUDGE PAYNE: The rest of it is whether it can be admitted, and you didn't mark it as an exhibit, et cetera. Those are the issues that need to be argued later.

The only question I was trying to deal with was his authenticity. Do you stipulate to the authenticity? [664] If you do, we don't have to worry the gentlemen. If not, take his deposition.

JUDGE LEE: But that does not obviate any objection he might have to relevance.

JUDGE PAYNE: Right, obviously not.

MR. BRADEN: I have no objection to the authenticity of the document. Frankly, without him present, I don't know how we would determine the date, the date of the actual report itself. There is no date.

So I have no clue as to how we would know an actual date on which the report is done. It is a matter of some significance.

JUDGE PAYNE: So you do have objection to the authenticity or not of that report?

MR. BRADEN: I have no objection to that.

JUDGE PAYNE: All right. Then we will deal with the admissibility later.

MR. HAMILTON: Well, I think what he has just said is he is reserving the ability or the admissibility without the foundation. I mean, he is raising a foundation problem that I am going to need the call the witness for.

JUDGE PAYNE: Well, it's five minutes to 5, five minutes until. I suggest maybe you just take his deposition and let him be done with it later or bring him [665] in next week.

Come ahead.

JUDGE LEE: Well give you 15 minutes.

MR. HAMILTON: Okay. Thank you, Your Honor, that should be all we need.

JUDGE LEE: Thank you, Dr. Hood.

THE WITNESS: Thank you.

NOTE: The witness stood down.

MR. HAMILTON: Your Honor, we would call Gerry Hebert

NOTE: The witness is sworn.

JOSEPH GERALD HEBERT,

a witness, called at the instance of the plaintiffs, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. HAMILTON:

Q Thank you, Mr. Hebert, for being here.

Can you please state your name for the record.

- A Joseph Gerald Hebert.
- Q Where are you currently employed?
- A I have several positions. I am an attorney in private practice, solo practice here in Alexandria, Virginia.

I also am the executive director and director of litigation at a nonpartisan nonprofit organization called [666] The Campaign Legal Center in Washington, D.C.

And I also teach law school at Georgetown University Law Center and New York Law School in New York City.

- Q Are you the former acting chief of the Voting section of the Department of Justice?
 - A Yes.
- Q I would like to direct your attention to two documents, I believe you have them in your hand. Do you have them?
 - A Yes, I do.
- Q Okay. So could you identify them just briefly by title. What are the two documents we're looking at here?
- A The two documents that I have are first a fax cover sheet sent to the Justice Department by the office of Senator A. Donald McEachin which is dated May 31, 2011, attaching to the fax cover sheet a fourpage letter by Senator McEachin to the chief of the Justice Department.

The second document is an e-mail that I had sent to the Justice Department attorneys who were reviewing the Senate redistricting map. And that e-mail is the cover page.

And attached to it is a report by an expert that I retained on behalf of the Senate Democratic caucus to analyze the Senate redistricting plan. And that is Dr. Lisa Handley's report which was attached to my e-mail [667] submitted to the Justice Department on June 1.

- ${\bf Q}$ Are these you are familiar with both of these documents?
- A Yes, I am. I reviewed them, I reviewed Dr. Handley's report, which was prepared at my request.
- Q Let me stop you there. When was that report prepared?
- A The initial analysis in the report was done before the plan was introduced in the Senate, in the legislature. So it was probably done sometime in April or May.
- Q And do you know why it was done before the plan was introduced in the Senate?
- A Well, we had drawn a map and we had wanted to determine whether the districts, the five majority African-American Senate districts would continue to perform as effective districts for African-American voters under the plan.

JUDGE LEE: I'm not clear. So what was your job? You hired Dr. Handley to do a report. Were you working for the Virginia Senate or for the Department of Justice?

THE WITNESS: I worked for the Virginia Senate Democratic caucus at that time.

JUDGE LEE: Okay.

THE WITNESS: My tenure at the Justice Department ended a long time ago, in 1994.

JUDGE LEE: So you were working for the VA Senate [668] as a consultant?

THE WITNESS: That's correct, legal counsel.

JUDGE LEE: All right, legal counsel. Thank you. I'm sorry.

BY MR. HAMILTON: (Continuing)

Q In the analysis –

MR. BRADEN: Your Honor, I hate to interrupt, but I think that's a mischaracterization of what his position was. I think there was a misunderstanding on your part.

I don't think he was actually working for the Senate. Am I correct?

THE WITNESS: I worked for the Senate Democratic caucus, which was the majority party in the Senate at that time.

BY MR. HAMILTON: (Continuing)

- Q Now let's turn to Senator McEachin's letter. Can you you are familiar with this document as well, sir?
 - A Yes.
 - Q How are you familiar with this letter?
- A Well, I was legal counsel to Senator McEachin. He drafted this letter. And as his counsel, he asked me to review it before he sent it.

Q Are these true and accurate copies of that letter and the racially polarized voting analysis?

A Yes. They are true and accurate copies of those [669] documents.

MR. HAMILTON: Your Honor, I would offer these two exhibits into evidence.

JUDGE LEE: I wasn't sure you were going to do admissibility. Go ahead, Mr. Braden.

JUDGE PAYNE: I think he is entitled to – you're going to cross-examine – you are offering testimony on the authenticity and the predicate for admissibility.

MR. HAMILTON: Correct.

JUDGE LEE: Right.

JUDGE PAYNE: He gets a chance to cross-examine. We cross the bridge of ruling on it later.

MR. HAMILTON: I would like to ask -

JUDGE PAYNE: The point being there may be argument.

MR. HAMILTON: I am refraining from asking one or two questions about the content of the analysis until it gets admitted into evidence.

JUDGE PAYNE: The analysis is whatever it is, Mr. Hamilton. You all don't – we can read it.

Let's go, Mr. Braden.

JUDGE LEE: If it is admitted.

JUDGE PAYNE: If it comes in, we can read it. Let's go, Mr. Braden, have you got a question?

MR. BRADEN: Your Honor, we will accept the [670] authenticity of the document, but we still object to its admissibility.

JUDGE PAYNE: All right, we know that. We will deal with that later.

We will see you all – you have got a witness that begins on Monday?

MR. BRADEN: Yes.

JUDGE PAYNE: How much longer is that witness?

MR. BRADEN: I would expect our witness on Monday on direct to be about an hour-and-a-half.

JUDGE PAYNE: All right. How long is your rebuttal? Recognizing that rebuttal in this district really means rebuttal. It doesn't mean rehash everything that has been done.

MR. HAMILTON: Understood, Your Honor. I have tried a case in this district before, and I remember the rules. We anticipate no longer than an hour in rebuttal.

JUDGE PAYNE: We would like to hear argument from you.

JUDGE LEE: We have motions hearings and sentencing in this courtroom tomorrow, so everything needs to be cleared out. I think you can probably keep your book shelves as long as they are organized.

I am a little concerned about them being so close to the door where the lockup is because we will prisoners [671] in and out of here. But everybody is going to have to clear out, we have to clear out too.

JUDGE PAYNE: Your argument will be 30 minutes a side. I guess the plaintiff has the burden, they can split it whichever way you want to do it, but it's 30 minutes each. And then there will be questions too.

MR. HAMILTON: 30 minutes a side on Monday, Your Honor?

JUDGE PAYNE: On Monday. As soon as you finish presenting evidence, if you would be prepared to do that. It would help us while all this is fresh in our mind.

We will probably not need any argument after you file your briefs. But if we do, we will call for that.

MR. HAMILTON: Thank you so much, Your Honor.

JUDGE PAYNE: All right, we will be adjourned.

(End of proceedings.)

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter.

/s/	
P. E. Peterson, RPR	Date

[672] IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA RICHMOND DIVISION

Civil Action No. 3:14CV852

GOLDEN BETHUNE-HILL, et al., vs.

VIRGINIA STATE BOARD OF ELECTIONS, et al.

July 13, 2015

COMPLETE TRANSCRIPT OF THE BENCH TRIAL

HEARD BEFORE:

THE HONORABLE ROBERT E. PAYNE THE HONORABLE GERALD BRUCE LEE THE HONORABLE BARBARA M. KEENAN

APPEARANCES:

Kevin J. Hamilton, Esquire Perkins Coie, LLP 1201 Third Avenue Suite 4800 Seattle, Washington 98010

Bruce V. Spiva, Esquire Aria C. Branch, Esquire 700 13th Street NW Suite 600 Washington, D.C. 20005 Counsel for the plaintiffs

Peppy Peterson, RPR Official Court Reporter United States District Court

[673] APPEARANCES: (cont'g)

Tony F. Troy, Esquire Eckert Seamans Cherin & Mellott, LLP 707 East Main Street Suite 1450 Richmond, Virginia 23219

Daniel A. Glass, Esquire Eckert Seamans Cherin & Mellott, LLC 1717 Pennsylvania Avenue, NW Suite 1200 Washington, D.C. 20006

Godfrey T. Pinn, Jr., Esquire Harrell & Chambliss, LLP 707 East Main Street Suite 1000 Richmond, Virginia 23219 Counsel for the Virginia State Board of Elections

E. Mark Braden, Esquire Katherine L. McKnight, Esquire Jennifer M. Walrath, Esquire Richard B. Raile, Esquire Baker & Hostetler, LLP 1050 Connecticut Avenue, NW Suite 1100 Washington, D.C. 20036

Dalton L. Oldham, Jr., Esquire Dalton L. Oldham, LLC 1119 Susan Street Columbia, South Carolina 29210 Counsel for Virginia House of Delegates

2158 [674] PROCEEDINGS

THE CLERK: 3:14 civil 852, Golden Bethune-Hill, et al., versus Virginia State Board of Elections, et al., versus Virginia House of Delegates, et al.

JUDGE PAYNE: Good morning. We have a witness, Mr. Braden?

MR. BRADEN: Yes, we do.

MS. McKNIGHT: Good morning, Your Honors. We'd like to call Dr. Thomas Hofeller to the stand.

JUDGE PAYNE: Dr. Hofeller.

MS. McKNIGHT: Your Honors, for reference, we've placed witness binders for this witness at your places. Your clerks have copies, and opposing counsel also has a copy.

THOMAS HOFELLER,

a witness, called at the instance of the intervenor defendants, having been first duly sworn, testified as follows:

MR. SPIVA: Sorry, Your Honors. I don't know exactly the appropriate place to raise this, but I object to Dr. Hofeller testifying. He's entirely duplicative of Dr. Hood and portions of Dr. Katz. He's been proffered to [675] talk about contiguity and compactness, and so I think this violates the Court's order that there should only be one expert per discipline.

MS. McKNIGHT: Your Honors, we've taken great effort to make sure that Dr. Hofeller will not duplicate testimony that you've already heard here in court. We suggest that if opposing counsel finds an issue along the way, we can address it at that time.

JUDGE PAYNE: I think that's the best way to proceed given the conversation that we had in the telephone scheduling conference about how we would deal with this matter, Mr. Spiva.

JUDGE LEE: I think the issue is the Polsby test and the Reock scores, you can address. This is in your report, so go on.

MR. SPIVA: Thank you, Your Honor.

MS. McKNIGHT: Thank you, Your Honor.

DIRECT EXAMINATION

BY MS. McKNIGHT:

- Q Good morning, Dr. Hofeller.
- A Good morning.
- Q Could you turn to what is labeled Defendant Intervenor's Exhibit 14 in your witness binder. Could you identify this document for the Court.
- [676] A This is the declaration that I filed with the Court in this case.
- Q And could you turn to page 26 of that document. Is that your résumé?
 - A It is.
- Q And is that copy of your résumé current and complete?
 - A Yes, it is.
 - Q And in what field do you have your Ph.D.?
 - A Government.
- Q Dr. Hofeller, could you take a moment to give the Court an overall summary of your experience in the field of redistricting.

- A I've been involved with redistricting for about 50 years, from 1965. I've been involved in almost all the states in the United States in one capacity or another primarily analyzing plans. I've offered expert testimony and done expert reports. I've done a lot of work advising people on the redistricting process, how to prepare for it, what data to gather, how to format it, and also involved in design and use of geographic information systems which are actually used to draw the lines. I've experienced interactions with legislators while they are drawing lines. I guess that would cover most of it.
- MS. McKNIGHT: Your Honors, the parties have stipulated that Dr. Hofeller is an expert in the field of [677] redistricting and have also stipulated to his treatment as an expert witness under Federal Rule of Evidence 702.

JUDGE PAYNE: All right.

- Q Dr. Hofeller, have you testified as an expert witness in other redistricting cases?
 - A Yes.
 - Q Approximately how many?
- A I don't remember how many, but it's been quite a few. Two cases that are notable are the *Gingles* case and the *Shaw* case, but also cases in other states and jurisdictions.
 - Q What were you retained to do in this case?
- A I was retained to look at the issues of compactness and contiguity and to also look at other factors that influence particularly compactness of districts and why those districts would have been drawn in the manner in which they have been drawn.

- Q And what materials did you use or review to develop your opinion?
- A Basically I used the census data from the 2010 decennial census. I used the geographic data files from the Census Bureau which were called the TIGER files, and I used a geographic mapping system called Maptitude for redistricting which is the real industry standard in redistricting.
- [678] Q And did you review any court case materials such as opinions or related expert reports?
- A Yes. I looked at well, I actually looked at Jamerson and Wilkins. I also looked at the last three House of Delegates redistricting plans in the state of Virginia, '91, 2001, and 2011.
- Q And did you review any expert reports in your preparation of your opinion?
- A I looked at all the expert reports that were submitted by the experts in this case. I looked at the Webster report in *Wilkins*. That's really it.
 - Q Did you review any deposition transcripts?
- A Yes, I read all the deposition transcripts from all the expert witnesses.
- Q Have you reviewed the plan at issue in this litigation?
 - A Yes.
- Q Dr. Hofeller, in general, who have your clients been?
- A Probably most of the clients I've worked for have been in the Republican party, but I've also worked for Democratic clients. I've worked for some minority clients. I've worked for nonpartisan county

governments, and I've worked in city governments where, again, the offices are nonpartisan.

- Q And what is your experience in drawing redistricting [679] plans?
- A I've I think I can honestly say to the Court that I've drawn hundreds of plans in one form or another. One of the things that I do a lot during redistricting is to look at states when the census data first comes out and analyze them to see what we can expect during the redistricting process in those states.
- Q Have you ever drafted any state legislative plan?
 - A I have.
- Q Have you ever drafted any representational plans at a county level?
 - A Yes.
- Q Have you ever drafted any representational plans at a municipal level?
 - A Yes.
- Q Have you ever drafted any plan that was adopted by any representational body anywhere?
 - A Yes.
- Q Have you drafted a plan that was approved by any state or federal court?
 - A Yes.
- Q And what is your background in measuring compactness?
- A Well, along this process, I've looked at compactness of plans over the last 40 years, and I also co-authored an article with Richard Niemi and Bernie

Grofman and Carl [680] Carulcci on compactness which is still, I believe, used as a standard for compactness measurements.

- Q Let me ask you a basic question. How do you go about drawing a redistricting map?
- A Well, there are lots of components that go into drawing a redistricting map, particularly when you're drawing a plan for a legislative body of any type. You have to gather all of the relevant data which usually consists of census data, the census mapping data, primary and general elections as required, and these have to be loaded into a redistricting system which people have to learn and you have to learn.

You often draw a number of rough maps, and in the legislative session, you have to interact with all the legislators to draft a plan, of course the main imperative being that the plan has to pass, has to get enough votes to pass.

Part of it as an expert is you have to advise your clients on what sort of pitfalls they might run into while they're drawing the map and how the map may be viewed after it's actually enacted.

- Q And we've heard reference to GIS before in this case. What is GIS?
- A It's literally a geographic information system. Maptitude for redistricting is built on one of those [681] platforms, and it's a way of presenting data such as census data, political data, election data, and registration data in a mapping format so it can be viewed and so that units of geography can be moved from one district to another or originally done to create districts.

- Q And in your work drawing plans, what is the different data you've used?
- A Not to be repetitive here, again, it's census data, it's geographic data which the Census Bureau also supplies us, and, again, it's the election results over multiple election years along with the accompanying registration figures.
- Q Is information about race included in that data that you consider?
- A Well, the data is provided by the Bureau of Census for redistricting specifically, and it constitutes the racial and ethnic breakdowns for all of the units of geography within the census down to the block level for both the total population and for the adult population.
 - Q So race is a consideration while drawing plans?
- A Race always has to be a consideration for the most part, because even before you start drafting plans, you have to look at the effects that plans might have on the Voting Rights Act in particular but just to know in [682] general. So in almost all states where I've been involved, it's been an issue, and if you're going to advise somebody or help somebody draft a map, you have to be knowledgeable about the demographics of the state.

And have you heard that there is a dispute in this case about BVAP or black voting-age population and which BVAP figure to use?

- A I have.
- Q And what do you know about that?

A Well, I mean, to be frankly honest, BVAP is a specific measurement given to the states by the United States

Census Bureau. It literally means the black votingage population of those people who responded to the questionnaire indicating themselves to be African American alone, and the confusion that came in this case is that the Legislative Services in Virginia decided that they were going to calculate it using two different data fields in the race record which confused the issue. So there's only one BVAP, and Virginia didn't – the Virginia legislative people didn't use it.

MR. SPIVA: Objection, Your Honor, and I move to strike that last response. There isn't a word in his expert report about what he just testified about.

JUDGE PAYNE: Is there, Ms. McKnight?

MS. McKNIGHT: Your Honors, what we'll get to [683] later on in questioning is that plaintiff's expert, Dr. Ansolabehere, drew Dr. Hofeller into the issue of BVAP with several of his points saying that Dr. Hofeller did not disagree with Dr. Ansolabehere on those points. So if Your Honors would prefer, I can address this question after we get to those points.

JUDGE PAYNE: I think probably so since he didn't affirmatively testify to it, and if Dr. Ansolabehere accused him of testifying to certain things, he can say I didn't do that and that's wrong. An affirmative showing at this stage is probably what you need to do given that he didn't opine on it in his opinion to begin with.

MS. McKNIGHT: Thank you, Your Honor.

Q Dr. Hofeller, I'd like to show you what is labeled Plaintiff's Exhibit 16. Now, Delegate Jones testified

earlier that this was the criteria used by the House Committee on Privileges and Elections to draw the 2000 plan.

Now, you've opined on compactness and factors that affected compactness. In your experience drawing and analyzing maps, do you agree with these criteria?

- A I do.
- Q Dr. Hofeller, all things being equal, is it easier to draw a Congressional map of 11 districts or a legislative map of 100?
- [684] A Strictly from the standpoint of drafting the plan, Congressional maps are always less difficult to draw because there are fewer districts in play and fewer personalities in play. The pieces of the puzzle, so to speak, are easier to put together. The only more difficult thing on Congressional maps is the populations have to be precisely equal, Congressional maps.
- Q Now, do you have any quarrels with how compactness has been measured by other experts in this case?
 - A No.
 - Q Why not?
- A Well, as I stated in my expert report, there are many, many ways to measure compactness, and different people have different favorites as to the way they want to do it that have come out in many articles which has been testified to before, and compactness is just really a way of looking at the districts. It's more like a flag than a conclusion about whether a district is too compact or compact enough.

- Q Now, we've heard testimony about the Reock and Polsby-Popper scoring system. Do you have anything additional that would be helpful to the Court?
- A I think the only thing that I would say, since I used both those scores in my expert report, was that Reock and Polsby-Popper were the scores used in the two Virginia [685] Supreme Court cases, *Jamerson* in after the '91 redistricting and *Wilkins* on the 2001 redistricting, and so I thought that they would be better to use, and they are generally easier to understand than the way the other scores are actually computed.
- Q Could you turn to pages 39 and 40 of your expert report. This is Defendant Intervenor's Exhibit 14.
- A Are those the pages at the bottom, or the pages in the report?
 - Q So let me just confirm.
 - A I see it on the screen.
- Q On the bottom, yeah. And they're Bates numbered.
 - A I'm sorry.
- Q That's fine. What do these figures show the Court?
- A These are just demonstrations of how Reock and Polsby-Popper work on actually four different sample districts, fairly simplified figures, although the one you are showing me, which is my figure two which is on page 40, is a rather complex figure with a lot of indentations.

I've put up for demonstration purposes the Polsby-Popper circle and the Reock circle to show how those circles change as they relate to different districts.

So, again, you can see primarily for Reock, Reock penalizes districts that are long and narrow, and [686] Polsby-Popper generally penalizes districts that have a lot of indentations like the figure on page 40.

- Q You can move away from that exhibit. Thank you for your testimony. Dr. Hofeller, I'd like to ask you about compactness issues in Virginia. Have you ever lived in Virginia before?
- A Oh, yes. My wife and I moved to Virginia in 1981 and lived in Virginia except for three years we actually spent in Washington state, and I just recently moved from Virginia down to North Carolina last October.
- Q And during that time, had you drawn any Virginia redistricting plans?
- A I've studied Virginia after the census data has come out each decade and drawn plans myself to see what was possible in Virginia. I've drawn multiple plans.
- Q Is it fair to say you've become well acquainted with Virginia geography and jurisdictions during that time?
- A For the most part, yes. There's always something new to learn.
- Q And how does Virginia's geography present challenges in computing compactness?
- A Well, I have to say it isn't so much with computing compactness, just with compactness in general. Is that what you meant to ask me?

Q Sure.

[687] A Virginia has an irregular shape and the counties in Virginia are not square and rectangular like the counties are particularly in some Midwest states. There are a lot of rivers in Virginia which shape county lines.

In some instances, one of the criteria with the legislature is to avoid crossing certain prominent water features, that's a challenge, too, which also would include the Eastern Shore.

Q And could you tell the Court how population shifts in Virginia affected compactness.

A I'd have to state by saying that the redistricting map that was drawn is a map which represents tension between all of the criteria which the legislature has sought to apply to the process, one-person-one-vote, of course, and the Voting Rights Act, but also communities of interest, and in the case of compactness, their desire to maintain cores of districts and to avoid putting multiple incumbents within the same districts also affected it because in Virginia, there was uneven growth over the last decade.

Some areas, particularly in the Washington, D.C. suburbs, Fairfax County, Loudoun County, Prince William County at a very, very rapid rate compared to the state's overall population, and there were sections along the southern Virginia border and the West Virginia border [688] along with the city areas of Richmond and Hampton and Newport News, and, let's see, Portsmouth, Chesapeake, and Norfolk and Virginia Beach that had districts that were underpopulated in terms of the new ideal population size.

So, generally, what you see when these population imbalances show up in the baseline plan when you are drawing the new plan is the boundaries of the districts have to migrate away from those areas of underpopulation towards areas that have more populations.

This sets up a ripple effect on the districts.

Sometimes the imbalance of population is so great that the map drafters will choose to collapse a district in an area of high under-population and resurrect it in an area with high population. This happened for several districts in Virginia through this process.

- Q So when you are looking to redraw a map in the redistricting process, if you have some districts that have near perfect population, can you just leave those alone while you are redrawing the plan?
- A Certainly incumbents would like you to do that, but first of all, you have to consider the populations of those districts, but the problem is you have to look at all the districting around those districts to see what the configuration is all the way around, and if you say right off the bat that any district that is almost right on [689] population is going to stay pretty much the way it is, and you're rippling the population from the areas of under-population to overpopulation, you would have to go around those districts, and that would actually create greater demographic problems, and it also would probably affect the core retention.

So the districts might get stretched out even more if you did that. It's simply unrealistic to think that the districts that are right exactly on population can remain where they are.

Q Now, specific to the challenged districts, you've prepared several demonstratives labeled Defendant

Intervenor's Exhibit 72 through 75. We'll take these one at a time. Starting with the first in that series, Exhibit 72, could you tell the Court what this map shows.

A This map shows the districts in the Norfolk area, the greater Norfolk area. They are shaded according to their percentage of deviation along the rainbow scale, and each district has the district number in it and the deviation of the baseline district.

These are the baseline districts from the new ideal district population for 2010. It shows, once again, that there was a huge core of underpopulated districts in the Norfolk area. It actually amounted to about an under-population slightly over one full district, and so [690] that shows the problem there. This problem is further compounded by the fact that this area is bounded by North Carolina on the south, by the Atlantic Ocean on the east, and by the Chesapeake Bay and the James River on the north, and so the only way that these under-population issues can be resolved is by pushing districts generally westerly up in that space between the James River and the North Carolina border on the south.

Q Could you turn to the Exhibit Number 73 and tell the Court what that map shows.

A This is essentially the same map as the one that was up before with the same coloring and the same information in each of the districts. The important thing to remember about this, again, is that the districts at the southern end of the peninsula, that area between the York River and James River, was very highly underpopulated, and that had to be resolved by moving districts generally northwesterly between the two rivers.

- Q And could you turn to Defendant Intervenor's Exhibit 74. This is another demonstrative. Could you tell the Court what this shows.
- A Again, it's the same map in the Richmond area which, again, shows the under-population of the core districts of Richmond and demonstrates, again, where the districts would have to migrate in order to pick up their needed [691] populations.
 - Q And could you turn to –

JUDGE PAYNE: Which way is that? Which direction would they have to migrate in order to pick up the core populations?

THE WITNESS: Your Honor, they would have to migrate to the blue colored district and kind of the aqua colored district to the south and somewhat to the east. I'm sorry, to the west. I misspoke myself there.

- Q And could you look at Defendant Intervenor's Exhibit 75, please, and tell the Court what that shows.
- A Your Honors, this is, again, the same map showing northern Virginia demonstrating a rather wide range of deviations particularly in inner Fairfax County and Arlington County and the extremely highly overpopulated districts in Loudoun Prince William and Loudoun County. Did I say that already?

There are also some overpopulated districts in outer Fairfax, but there are a lot of ways that those districts could actually go, but what we saw on this map was particularly District 13, I believe, if I see it correctly, which had actually enough population to form two full districts within it and another third of a district, so it's 138 percent over the ideal population size. Huge growth.

[692] Q Shifting focus a little bit, plaintiff's expert, Dr. Ansolabehere, stated that you did not challenge or dispute the points he made in paragraph 115 of his reply report. We're going to put this paragraph on the screen. You can also locate it in your binders in Plaintiff's Exhibit 51 at page 42. Could you read it to yourself and then tell the Court if you dispute anything in that paragraph.

A I guess I have to begin by saying that wasn't a part of my original analysis, but I dispute his conclusion in this. There are several things wrong with it. First of all, I tried to actually replicate his assertion that if you didn't add any majority BVAP population to any of the districts, that they would come to at least 50 percent. I didn't find that to be the case. Some of them dropped below 49 percent.

The problem you have is, again, that district is not staying in place. The districts are moving, so territory is being added and territory is being subtracted because of the ripple effect, and you are trying to balance out the voting age, the total voting-age population against the African American voting-age population.

Q Now, I understand that you were not –

A I'm just reading farther. Again, I have a general problem with Dr. Ansolabehere's analysis of preferred candidates. Having used general election data, he is not [693] really measuring preferred candidates of African Americans. He's measuring preferred party choice, partisan, the partisan tag on candidates. In order to do the preferred candidates of choice, you have to go back to primary data, and so I think that's something that follows generally through his entire analysis.

Also, as I think I heard before, also the elections he's analyzing are even-year elections which are elections for governor, for president, and they don't fall in the same years as the House of Delegates, and the dynamics in the House of Delegates elections are much different than they are in those elections, particularly in the on-year which, Your Honors, is what we call the even numbered years.

Q Now, do you see in paragraph 115 Dr. Ansolabehere's reference to BVAP?

A I do.

Q And what do you know about a dispute in this case in which – over which BVAP figure to use?

A Once again, I have to restate that there is only one BVAP that is the actual BVAP, and that's the one that comes from the United States Census Bureau which includes only those African Americans 18 years and older who designated African American solely as their race.

MR. SPIVA: I would object to that last answer, [694] Your Honors, and move to strike. I don't think that's responsive to anything in the paragraph that we just saw, the definition of BVAP, DOJ definition of BVAP, and there's certainly nothing in Dr. Hofeller's report about that.

JUDGE PAYNE: Overruled.

Q You mentioned an inability to replicate Dr. Ansolabehere's analysis. Could part of that inability be related to his BVAP category?

A It could be. Not to a particularly great extent, but I did the analysis on the true BVAP. I might add, too, the plaintiff's attorney mentioned DOJ BVAP. It's not DOJ BVAP. It's DOJ VAP which is an entirely

different percentage. DOJ recognizes the same BVAP that I recognize as being the true BVAP.

- Q Now, I'd like to put up for you plaintiffs' demonstrative that they used in their direct examination of Dr. Ansolabehere on these points. Could you look at this demonstrative and explain to the Court what this chart shows.
- A Well, it's his projected vote share, I believe, for African American preferred candidates. Again, the 50 percent line is up at about 53 and a half percent. I think that was just a mistake in drafting that line, but it, perhaps, gives a different presentation to the chart.
- [695] Once again, I have to dispute his mention of African American preferred candidates. It really is the candidates preferred partisan candidate. We're looking at Republican versus Democrat here, and it's not really their preferred candidate of choice. It was really the only choice they had which was between a Republican and a Democratic candidate laying aside that there might be some Independents and other minor parties.
- Q So does this chart show that only a 50 percent BVAP level in any of these districts would be sufficient for the majority-minority district to elect its preferred candidate of choice?
- A I would say that there simply isn't enough the data used for all these analyses was incorrect. You have to use primary data to ferret that out, and there's very limited primary data for Virginia's House of Delegates districts, and so I don't think there's any way to determine what that line would be.
 - Q So is that a no, just for the court record?

- A I guess so, yes. I'd have to have the question again.
 - Q I'll read it one more time.
 - A I'm sorry.
- Q Does this chart show that only a 50 percent BVAP level in any one of these districts would be sufficient for the majority-minority district to elect its preferred [696] candidate of choice?
- A Again, I'd say no but with the same qualification. The preference is for the political party of the candidate, not necessarily that it's preferred by African Americans for that district.
- Q Dr. Ansolabehere stated that you did not challenge or dispute the points he made in paragraph 93 of his report. This includes paragraphs 92, 93, and 94. This is on page 34, by the way, of Plaintiff's Exhibit 51.

I'm going to put these paragraphs on the screen.

Could you read them to yourself and then tell the Court if you dispute anything in them.

A I will. Again, I disagree with these two paragraphs, in that I once again have to mention that the data that was used is not the correct data to make that judgment. You have to turn to primary data to make this judgment. These exogenous elections won't actually show what he's purporting to show.

JUDGE PAYNE: You say these two paragraphs.

She's referred – I guess 92 and 93; is that what you are talking about?

THE WITNESS: Yes, Your Honor.

JUDGE PAYNE: I see.

Q Is there anything unique about Virginia that makes polarization analyses difficult?

[697] A Well, again, if you are using primary election data, there's a real dearth of primary election data in Virginia. Also, the fact that Virginia has a unique primary system. Republicans hardly ever have primaries, and it's an open primary, so Republicans can come over and vote in Democratic primaries, where there are primaries, and also they have to be meaningful primaries where you have candidates that were actually contesting.

Some people just throw their name in the ring and don't really do much, so that unique system which allows all the voters to vote in the democratic primary also makes it even more difficult. Of course, the other problem you have in Virginia that you don't have in some other states is they don't have partisan registration on their registration roles, and they don't have race on their registration roles which is present in other states such as North Carolina where I live.

Q As you are drawing a map, how often are you looking at compactness scores?

A I would say that the main measurement of compactness scores while you are drawing a map is to look at the shapes of districts, so-called eyeball test that was mentioned in court before, and when I'm drawing districts, I try to make them, to the extent possible, as compact as I can make them in that manner, but the software, the [698] Maptitude software does not allow you to compute compactness scores on the run, each time you move one unit of geography from one district to another, so that isn't something that comes up on the screen as you are drawing districts.

So you may at some point look at it in some major – look at the map at a certain plateau or something, but I've never used them or seen anybody else use them as they're actually drawing the districts.

- Q Now, Dr. Ansolabehere stated that you did not challenge or dispute the points he made in paragraph 62 of his reply report. I'm going to put up paragraph 62 and 63 on your screen.
- MS. McKNIGHT: For the Court's reference, this is Plaintiff's Exhibit 51 at pages 21 and 22.
- Q Dr. Hofeller, could you take a look at these paragraphs and tell the Court if you dispute anything in them.
- A I have several issues with this. First of all, there isn't exactitude in determining the partisanship levels in the areas that are moved in and out, particularly in the split precincts, because of the manner in which the data is compiled.

Secondly, I state the same problem, that we should be looking at primary data, and we should be looking at data [699] in the elections for the House of Delegates. I also have to add that when the maps are being drawn, although I wasn't involved in this process but I know how it works, people are interested in what's being moved and moved out as it affects all of the surrounding districts as well.

So there are lots of choices that are being made. In general, redistricting is a game of margins, as I like to tell people, and if the primary intent is partisan after one-person-one-vote, then even a small change in the partisan vote of an area is important for both the Democratic and Republican districts. So this type of

analysis is not being made as the map is actually being drawn and the process is unfolding.

- Q So when you are drawing a map and you're look at VTDs and deciding which ones to move in and out, are you asking yourself how does this VTD vote?
- A Well, certainly, but this analysis implies that there would be a discrete score for each precinct that's being moved in and out, and in my experience, nobody has ever put up those kinds of figures inside the precinct or VTD to show as they're moving these VTDs in and out of the district. So this is an after-the-fact analysis. And once again, these changes of precincts are being influenced by district cores, by population ripples, by incumbent residences, and all of the other factors that go [700] into making the plan.
- Q As you are drawing a map, how often are you looking at polarization or racial block voting analyses?
- A To the best of my knowledge, never as the map is being drawn. Once again, that analysis is not embedded in the software, and if it were, every time you moved a unit, it would take forever to draw the map.
- Q And Dr. Ansolabehere testified that it would have been very easy to conduct a racial block voting analysis during the map-drawing process. Do you agree with him?
- MR. SPIVA: Objection, Your Honor. This is way outside the scope of Dr. Hofeller's expert report, and this exercise of replying to Dr. Ansolabehere's reply really doesn't give a justification either because Dr. Ansolabehere's initial report was done before Dr. Hofeller's report. He had his chance to reply in his report and didn't include any of this –

JUDGE PAYNE: I didn't hear you.

MR. SPIVA: Didn't include any of this opinion about racial –

JUDGE PAYNE: I thought we had already dealt with that, though, and he's testified about it throughout. So what do you have to say about his objection that the comment on Dr. Ansolabehere's particular statement is not within the permissible range of examination?

[701] MS. McKNIGHT: Well, contrary to what plaintiffs' counsel just said, all of these points that Dr. Ansolabehere brought up were brought up in his reply report, and he specifically said that Dr. Hofeller did not dispute it.

This specific paragraph raises the issue of racial and partisan composition and polarization, and that's why we believe we're able to ask Dr. Hofeller whether he agrees that an analysis of those factors could have been done or would have been useful at the time.

MR. SPIVA: The paragraph doesn't say anything about doing a racial polarization analysis, Your Honor. The other thing is, he's – Dr. Ansolabehere's reply report is saying Dr. Hofeller and Dr. Hood and Dr. Katz did not dispute these points in their reports. That's what he's talking about, not that they didn't dispute it in general.

JUDGE PAYNE: Overruled. Go ahead and ask the question.

Q Dr. Hofeller, Dr. Ansolabehere testified that it would have been very easy to conduct a racial block voting analysis during the map drawing process. Do you agree with him?

A No.

Q Why not?

[702] A Once again, because those analyses are not part of the software that is used for redistricting, so, in essence, if you did it while you were drawing, after you made each move you'd have to export all the data from the redistricting system and load it into a separate computer, at least into a separate program if you had such a program on your machine, and run it.

It would have been extremely slow because those particular analyses don't run quickly, and, again, the wrong data was used.

Q Dr. Ansolabehere stated that you did not challenge or dispute the points he made in paragraph 64 of his reply report. We're putting this paragraph on the screen. For the Court's reference, this is page 22 of Plaintiff's Exhibit 51. Could you read this paragraph to yourself and then tell the Court if you dispute anything in it.

A Once again, the party data is very hard to compute, and we're looking at – the only choice that the voters had in these precincts, according to the analysis that was presented by Dr. Ansolabehere, were general elections in the on years.

The other problem that I have with this statement is that, once again, as the map is being drawn, I'm absolutely certain through my experience in redistricting, that the map-drawers were not checking to see those [703] factors in these individual precincts as they were being moved from one district to another, again, the balancing out the factors of the population shifts, the incumbent residences, the district cores, communities of interest, all of those redistricting criteria which we saw previously in my testimony.

- Q Plaintiff's expert also stated that you did not challenge or dispute the points he made in paragraph 65 of his reply report. This is on page 22 and 23 of Plaintiff's Exhibit 51. Could you review this paragraph, read it to yourself and tell the Court if your response is similar to your response to paragraph 64 of Dr. Ansolabehere's report.
- A Once again, I think some of the other witnesses for defendants spoke to this, but I have generally the same issues with it that I had before in above.
 - Q Now, Dr. Ansolabehere –

JUDGE PAYNE: You say in above. You mean in what you testified to about paragraph 64 or something else?

THE WITNESS: What I testified in previous questions in this testimony that again — I'm sorry, Your Honor, that there were a lot of other factors that were much more important to the map-drafters in this plan than were this specific analysis. It wasn't on the map, they probably weren't cognizant of this. Again, if you look at [704] their stated criteria goals, it isn't in there.

MR. SPIVA: Your Honor, move to strike, speculation, lack of foundation.

JUDGE PAYNE: Overruled.

Q Dr. Ansolabehere stated that you did not challenge or dispute the points he made in paragraph 52 of his reply report. This is on page 17 of Plaintiff's Exhibit 51.

I'm going to put this on the screen. Could you read it to yourself and let us know, does this make sense to you?

- A No.
- Q Why not?
- A Well, first of all, HD 100 is the district that comes over from the Eastern Shore peninsula of Virginia which does not include enough population for a single district. So there's nowhere else for that District 100 to go except across the bay, either across the mouth of the Chesapeake Bay or across the bay somewhere else further north to pick up its needed population.

So this statement is not – doesn't make any sense to me, because it doesn't really influence why 80 and 89 were drawn the way they were drawn, and it certainly didn't affect the – his BVAP measurement of how these districts were drawn. It just didn't make any sense to me. Perhaps he was trying to say something a little different.

- Q Now, Dr. Ansolabehere stated that you did not [705] challenge or dispute the points he made in paragraph 26 of his reply report. This is on page eight of Plaintiff's Exhibit 51. We're putting this paragraph on the screen. Could you read it to yourself and then tell the Court if you dispute anything in it.
- A Would you ask that question directly again? I want to know if I need to give you a direct yes or no.
- Q Sure. Could you read this paragraph to yourself and then tell the Court if you dispute anything in it.
 - A I do.
 - Q What do you dispute?
- A Well, first of all, I looked at the 12 challenged districts versus the rest of the state and the difference in the averages is actually quite small. It's not really

significant in my mind as being different, and I think if you look at where all of the House of Delegates districts rank on a chart under Reock, you'd find that, I believe, seven of the districts fell – the seven least compact districts were in the first 50 districts going down that chart and five in the last. So these districts' compactness scores fell all across that continuum from the least compact to the most compact.

- Q Dr. Hofeller, we've just gone through a series of specific examples in Dr. Ansolabehere's reply report where he suggested that you did not dispute a point of his. [706] There are a few other examples, including paragraphs 11, 39, 68, and 87, but for the sake of efficiency, I'd like to ask you, does an absence of dispute on your part in your expert report suggest agreement with Dr. Ansolabehere?
 - A Certainly not.
- Q And you were here for the testimony by Drs. Katz and Hood?
 - A Yes.
- Q And in general you agreed with Dr. Katz's and Dr. Hood's responses to Dr. Ansolabehere's reports?
- A Actually I think their testimony speaks for itself and I have no issue.
- Q Dr. Hofeller, I'd like to turn to your expert report in this matter. For the Court's reference, we will be working in different pages in Defendant Intervenor's Exhibit 14.

To begin, Dr. Hofeller, could you look at pages 41 and 62 together. I know we'll need to flip back and forth, but that's 41 and 62.

A Page 41 is a map of the North Carolina Congressional districts that were enacted in 1992 which actually were the subject of the Shaw litigation. The two districts were the African American majority districts that were drawn by the State of North Carolina. I know them well, [707] because I offered testimony in this case.

I was particularly interested in District 12 which is the red district. Many descriptions of this district, including the fact that it was only contiguous by point, and that's no longer actually allowed in North Carolina, but I put in table one, which is actually Exhibit 14, page – sorry, my eyes. 62, I believe. And interested in District 12 which has a Reock score of .05 and a Polsby-Popper score of .01, kind of the lowest Polsby-Popper score you can actually have without being a straight line, and I give this to the Court just as an example of the type of compactness issues that the Court was looking at in *Shaw*.

Q Could you turn to pages 43 and 63 in your report and tell the Court what these show.

A This is an example from the state of Illinois on the map. I guess of particular interest is the red district, which is District 4, which was actually a Latino district in the city of Chicago. The two Latino communities in Chicago were separated by a black community, and this was an attempt to draw them together in a district with enough population for a full Congressional district.

This was actually not the specific map, but it was very similar. This was the subject of a federal court case, three-judge panel case, and the Court actually [708] referred to this district as the earmuff district,

which everybody now calls it by, and it was ruled to be compact enough in this situation.

But of other interest are District 1, which is the blue district, and District 2, which is the green district, which are African-American districts, and once again, that's an example of districts which were found to be acceptable.

- Q Now, could you turn to page 44 of your report. Could you tell the Court, what is this map and what does it show?
- A This is a map of the 12 challenged districts showing all of the challenged districts, the Richmond area, the Southside, and Hampton Roads.
- Q And specific to challenged District 63 and 75, in your opinion, did you see any compactness or contiguity issues with either of those districts?
 - A I did not.
- Q Now, could you turn to page 46 of your report. What is this map and what does it show the Court?
- A This is a blowup, so to speak, of the Richmond area districts and also District 63. It's, perhaps, instructive because of the withdrawal of District 74 from crossing the James River estuary.
- Q And regarding challenged Districts 69, 70, 71, and 74, [709] in your opinion, did you see any compactness or contiguity issues with any of those challenged districts?
 - A I did not.
- Q Could you turn to page 45 of your report. What is this map, and what does it show the Court?

- A Again, this is a blowup of the original map that showed all of the challenged districts which shows the Hampton area and the Norfolk area in the southeast corner of the state.
- Q And specific to challenged Districts 77, 80, 89, or 90, did you see any compactness or contiguity issues with those districts?
 - A I did not.
- Q Could you turn to page 47 of your report. What is this map and what does it show the Court?
- A These are the two challenged districts on the peninsula, namely Newport News and Hampton city, showing those districts.
- Q And in your opinion, did you see any compactness or contiguity issues with challenged Districts 92 or 95?
 - A I did not.
- Q Could you turn to page 51 of your report. What is this map and what does it show the Court?
- A Again, this is a demonstrative map, and it shows some non-challenged districts with some of the district [710] configurations which are also which also have low compactness scores. So it gives a sample of what was going on in other portions of the state. I presented some other similar districts in my report.
- Q Could you turn to page 52 of your report and tell the Court what this map is and what it shows?
- A These are two state Senate districts drawn in 1991 which were the subject of the *Jamerson* case, particularly 18 which had a very low compactness score. What's interesting about this district, of course, aside from its general shape, is it had an arm going

eastward out of the Suffolk city portion of the district into Portsmouth and Chesapeake. That little arm that goes out actually goes through the Great Dismal Swamp and does not have a road connection. There is actually a railroad on one side.

- Q Now, you testified earlier -
- A I'm sorry. Could I say one more thing? Again, in *Jamerson*, this district was judged to be sufficiently compact to fall within the legislature's discretion balancing the other factors.
- Q Now, you testified earlier you had reviewed both the *Jamerson* and *Wilkins v. West* cases in developing your opinion in this matter, and you testified that you reviewed the Webster expert opinion in the *Wilkins* case; is that right?

[711] A I did.

- Q Why did you review that report?
- A Well, it was a report attached to the cases, and it discussed compactness. It had some maps I wanted to look at, it had some correspondence I wanted to look at, although I didn't depend on Webster's scores, but I did check them against my scores to make sure I was in the right ballpark, because the 1991 map is a little further back in history, and I wanted to make sure I had the correct shape file, and since my compactness scores aligned with his, I was confident that I was dealing with the correct map.
- Q I was going to ask you, how did it inform your opinion, but I believe you just answered that; is that right?
 - A I believe I did, yes.
 - Q We're going to put up Defendant Intervenor's

Exhibit 35. This is the Webster report. Is this what you were just referring to, Dr. Hofeller?

A It was.

JUDGE PAYNE: Excuse me, Ms. McKnight. He has an objection, I think.

MR. SPIVA: Yes, Your Honor. I object to the use of this report or any testimony about it really for the same reasons we objected to the Loewen report that was [712] excluded last week. This was never disclosed during the discovery process. It's an undisclosed expert report. It's not in his report, disclosed as something that he relied upon, and has never been disclosed to us as something he relied upon so we could ask questions of him.

Obviously we couldn't ask questions of Dr. Webster since it wasn't disclosed to us. It's hearsay. It's also a 13-year-old report about a different case, so it's irrelevant, and also the map-drawer, Delegate Jones, did not rely on the Webster report.

MS. McKNIGHT: Your Honor, this document was produced in discovery — I'll highlight the Bates number for you — in response to a request for any documents that Dr. Hofeller relied on in forming his opinion. He did rely on this report —

JUDGE PAYNE: You say the request actually asked for production of documents that he relied on?

MS. McKNIGHT: Pardon me. I'm paraphrasing. It may have been reviewed, documents he reviewed.

JUDGE PAYNE: Reviewed or saw or considered, whatever? Do you agree with that? You all are at odds over a very simple thing. Either it was or it wasn't asked for, and it was or wasn't provided, and we

shouldn't have to be dealing with that now. Are you withdrawing that in view of her proffer?

[713] MR. SPIVA: I don't have a quarrel with the proffer, Your Honor, but there's not a word in his expert report about –

JUDGE PAYNE: Excuse me, Mr. Spiva. That ground then is overruled. What else do you have to say?

MS. McKNIGHT: Not only did he rely on it, he referenced this by name in his report.

JUDGE PAYNE: Where does he reference it in his report?

MS. McKNIGHT: Pardon me, Your Honor. Let me locate it for you.

JUDGE PAYNE: Why don't you go onto another question, and let's see if your team can find where it was referenced.

MR. HAMILTON: Your Honor, may I be heard? The document was first produced on May 14th.

JUDGE PAYNE: Come to the lectern. I'm sorry, I was trying not to interrupt you when I was pointing.

MR. SPIVA: Your Honor, it was produced on

May 14th of this year, and the deposition was two days prior to that, so it was not produced as something that he relied upon prior to the deposition. The other thing is –

JUDGE PAYNE: That doesn't follow to me. Let's let her ask other questions, and then we'll see about [714] this. The first ground of your objection has been overruled. That's how I prefer to proceed. I think it makes more sense. All right, go ahead. Do you have

questions to ask him about something other than this report?

MS. McKNIGHT: Something other than this -

THE COURT: Don't ask him about this report until it gets ruled on.

MS. McKNIGHT: I understand, Your Honor, and I'm prepared to respond to his other arguments on that exhibit at that time.

JUDGE PAYNE: We'll do that all at the same time.

- Q Dr. Hofeller, could you turn to page 55 of your report. What is this map and what does it show the Court?
- A Again, this is an example of a 1991 Senate district, District 16, and shows another one of the districts with a very odd shape that also was acceptable in *Jamerson*, according to the *Jamerson* standard I could call it. I'll leave the legalities up to the attorneys here.
- Q Okay, and could you turn to page 60 of your expert report. What is this map and what does it show the Court?
- A This map is interesting because it shows three versions of House District 74, one in 1991, one in 2001, and one in 2011, and how that district changed through those three redistricting cycles.
- [715] It's interesting to note that the general configuration of the district has remained the same. As I look at the district, the 91 district doesn't include all of Charles City which is the case for 2011, and the district in 2001 actually crossed the James River into Hopewell, I think it was, and that was withdrawn from

Hopewell in the 2011 configuration, and also – where is the pen that I – or do I just draw?

JUDGE PAYNE: You can use your finger.

THE WITNESS: I'm sorry, I've never seen this before. If you look on this map, the 1991 map – did that come through?

JUDGE PAYNE: Didn't look like it.

THE WITNESS: There we go. And the 2001 map, you'll see that the district to the north comes over the Henrico County line to grab a piece of that county. This county crossing is resolved in 2011 where you see District 74 comes all the way and abuts the county line.

So I think that the district in 2011 is actually truer to the criteria stated by the House of Delegates than are the two previous maps, but really it's the same map, and, of course, the low compactness scores caused by the narrow long district, the Reock score.

- Q Thank you, Dr. Hofeller. Could you turn to page 61 of your report. What are these maps, and what do they show [716] the Court?
- A These are districts from the 1991 House plan, again showing some of the district configurations that were drawn from that plan.
- Q Now, Dr. Ansolabehere opined that any Reock score below .2 would be considered low compactness. Do you agree?
 - A No.
 - Q Why not?
- A First of all, I have no idea where he got that arbitrary number, but there is no bright line score in

any of these compactness measures that I've seen that sets districts as being unacceptable or being particularly egregious in terms of low compactness scores.

Again, it's a continuum that goes from cold to hot or whatever other graded measurement, gradiated measurement you would like to give it, so I just simply don't understand where that came from.

JUDGE LEE: Are you saying that there's no authoritative source that says a particular Reock score somehow violates the law or is not compact?

THE WITNESS: Your Honor, there certainly is no score that I've seen experts state is unacceptable, and in terms of other states, usually most states just say districts shall be compact or something like that. They [717] don't go into measurements. A few states do. A handful of states try and make a little bit of an attempt to bow to measurements, but no state has actually set an arbitrary bright line. It just isn't there. Does that answer your question, Your Honor?

JUDGE LEE: Yes, thank you very much.

Q Could you turn to page 64 of your expert report. What is this table and what does it show the Court?

A This table shows actually the 1991, 2001, 2011 House maps and the same years for the Senate maps and shows the minimum, maximum, and mean Reock scores and the Polsby-Popper scores.

So perhaps the important characterization I've put actually in color there, which is the 1991 Senate map in which the Court opined on compactness which had – that map had a minimum score for one of its districts of .02 for Reock and .09 for Polsby-Popper, and then I look at the 2011 House map by means of

comparison and see that the lowest district was .14 for Reock, and for Polsby-Popper it was .08.

And the means were the same for Reock and the means were the same for Polsby-Popper. So I simply don't see that there's any appreciable, not even appreciable, any real difference between those scores.

JUDGE PAYNE: Between which scores?

[718] THE WITNESS: Your Honor, the minimum scores for the 1991 Senate map and the 2011 House map. And also the mean scores and the same for Polsby-Popper. Those two maps which are shaded, the Senate map is shaded red and the house map is shaded green. I hope you have that shading on your copies.

JUDGE PAYNE: We do.

THE WITNESS: Thank you.

- Q Dr. Hofeller, does this table show that the 2011 plan was an outlier?
 - A No, it certainly wasn't.
- Q And does this table show that the lowest scoring districts in the 2011 plan were outliers?
 - A No.
- Q Could you turn to page 81 of your report. Could you tell the Court what this table is and what it shows them.
- A This is essentially a core retention analysis using two analyses. One is the part of the old district which you find in the new district, and the other one is the part of the new district that's made up of the old district.

There are two different measurements which measure core retention, and I gave the average score

for the challenged districts of both of these scores. I also noted on the column on the right the deviations of the [719] baseline map for these districts which also underscores some of the difficulties that the map-drafters of the new map had in doing these core retentions because of these underpopulated districts where a lot of population had to be added to underpopulated districts that were, in many cases, clustered together which makes that even more difficult.

- Q Sorry to take a step back, but what is core retention?
- A Again, core retention is how much of the baseline district, the old district, is found in the new district, and, again, the second column there is how much of the new district is made up of the old district.

Since the population changed, those two figures will be different. It's one of the criteria that the legislature had to be looking at, and also, if you're going to try and avoid pairing incumbents, you want to give them the highest amount of core retention when they're alone in their district.

- Q Now, could you turn to page 82 of your report. What is this table and what does it show the Court?
- A This shows one of the core retention scores for all 100 districts. And I think probably the important figure is found at the bottom of the report in the footnotes.
- Q We'll turn to that page for you and enlarge the footnote. What does this footnote show the Court?
- [720] A The second note, the second note says that the average core retention for the 100 districts was 67.09 percent, and for the 97 districts which were not

collapsed, it was 69.09 percent. For the 12 African-American majority districts, the contested districts, the average core retention was 72.76.

Actually, if you look at core retention for the remaining districts, excluding the contested districts or African-American districts, the score for the other 88 districts would be even lower as compared to the contested districts.

So core retention for the contested districts or the majority African-American districts was significantly higher, by almost ten percent, probably even more.

- Q Pardon me. Did the numbers in this table and in your footnote indicate that core retention was a key factor in drawing the plan?
- A It certainly wasn't by accident. So somebody had to set out to draw these districts with high core retention. It's a very-often-used criteria or goal in many redistricting plans but maybe can't be as high in every plan.
- Q I'd like to refer you to the demonstrative that's titled Compactness Demonstrative in your binder. I believe it's near the back of your binders. Could you [721] tell the Court what this shows.
- A This particular table, the first part of the table shows the Reock scores for the ten districts with the lowest scores. The blue districts are contested districts, and the unshaded districts are uncontested districts, and it shows of the ten, seven were uncontested districts.

The bottom part says that if you separate the districts into the 50 with the lowest scores and the 50 with the highest scores, that for the challenged

districts, seven of them appear in the bottom 50 and five would appear, by subtraction, in the top.

JUDGE LEE: What exhibit number is this?

MS. McKNIGHT: This is a demonstrative, Your Honor, and it would be in the back of your witness binder. It's titled Compactness Demonstrative.

JUDGE LEE: I see it. Thank you.

MS. McKNIGHT: Sure.

- Q Now, Dr. Hofeller, in this table, are the challenged districts outliers?
- A Well, again, I think I indicated in response to a previous question that I didn't think there were any outliers particularly compared to the previous plans in the state. I mean, I would note, for instance, just by observation, that the difference in compactness between [722] the least compact district is .014, and the tenth one down there is .2. That's not a very different compactness score, so they are basically in the same area.
- Q Dr. Hofeller, could you summarize for the Court your conclusions in your expert report?
- A Again, I'd say that I don't find any compactness issues in the 2011 map. I find that most of the district configurations were caused by the other criteria which the state enunciated, one person one vote, core retentions, communities of interest, and resolving those ripple effects caused from population gains and also the political goals of the map-drawers. So I don't see compactness as an issue here.

The other thing that I conclude is that there really were not contiguity issues on the map. Some were mentioned in the reply report to my report by Dr.

Ansolabehere, but these were really very minor crossings of rivers without roads which nobody, in my experience in the redistricting process, would ever be considered as a contiguity problem, and also, with regard to the practice in Virginia, it wouldn't be a contiguity problem.

The only time I've seen contiguity be a problem in

Virginia was when the portion of the district separated by the waterway was not directly across the water. Of course, we already talked about District 100.

[723] Q And now, in your expert opinion, is there any indication that race predominated over other redistricting criteria in the drawing of the 2011 map?

A Not in my expert opinion, no.

MS. McKNIGHT: Your Honors, I have no further questions. We'd like to withdraw the offer of Defendant Intervenor's Exhibit 35 as an exhibit.

JUDGE PAYNE: All right. At this time, we'll take the morning recess. Be back in 15 minutes.

(Recess taken.)

NOTE: After the morning recess, the case continues as follows:

JUDGE PAYNE: Dr. Hofeller, you are under the same oath that you took earlier.

All right, ready?

MR. SPIVA: Your Honor, before I begin cross-examination, I just wanted to correct one thing that I said earlier. I checked and I had made a mistake. The Webster report was actually produced before Dr. Hofeller's deposition. I have told opposing counsel about my error, but I wanted to correct the record.

JUDGE PAYNE: That's fine. I don't know that it needed correcting. But in the heat of litigation, that [724] kind of thing happens every once in awhile. I wouldn't worry too much about it. Go ahead and worry about the thing you need to worry about.

MR. SPIVA: Okay. Thank you, Your Honor.

JUDGE LEE: We appreciate you making the record clear.

JUDGE PAYNE: Yes.

MR. SPIVA: Thank you.

CROSS-EXAMINATION

BY MR. SPIVA:

- Q Good afternoon, Dr. Hofeller. Good to see you again.
 - A Thank you. Good morning to you, too.
- Q Thank you. Dr. Hofeller, you are not here to offer an opinion on whether race was the predominant figure in the drawing of the challenged districts, are you?
- A Well, actually, I think I am because, again, this was the subject of the reply report of Dr. Ansolabehere which I just offered testimony on.
- Q Let me ask you this, Dr. Hofeller. In your expert report you offered no opinion on whether race was the predominant factor in the drawing of the challenged districts, correct?
 - A That's correct.
- Q And in your expert report you expressed no opinion on [725] whether any of the 12 challenged House districts need to have at least a 55 percent black

voting-age population in order to preserve the African-American community's ability to elect a candidate of its choice, that's correct also?

- A In my report?
- Q Yes.
- A My initial report, is that what you said?
- Q Yes, in your report.
- A I'm sorry, wrong question.
- Q Yes, I know. Sorry.
- A That was not in my initial report. The only thing that I looked at those percentages for was to look at how they related to compactness issues.
- Q And I take it you have not done any racial bloc voting analysis of any of the challenged districts in the 2011 map, correct?
 - A Yes, that's correct.
- Q Okay. And you would agree with me, Dr. Hofeller, that to determine whether a map protects the minority community's ability to elect a candidate of its choice, you would agree that one of the first things you probably should do is look at racial bloc voting analysis for the state to see whether or not that exists in the state, correct?
- A Yes. I would have to answer that by saying, unless [726] the redistricting authority has some reason to believe that racial bloc voting was present or was found to be present in the past and hasn't continued. On hearing all this, it might have been better if there had been such a report. But I think that was testified to by the other witnesses.

- Q Dr. Hofeller, do you recall that you gave a deposition in this case, correct?
 - A Yes.
- Q Okay. Let me turn your attention to page 175, line 21 of your deposition. It will appear on the screen.

And do you recall in your deposition you were asked: "What sort of analysis would you perform to determine compliance with Section 2 and, when it was in effect, Section 5? Answer: Once again, my preferred method is to present the facts to the attorneys and let the attorneys figure it out. Question. Right. What sorts of facts or analysis would you need to get that kind of advice? Answer: One of the first things you probably should do is look at racial bloc voting analysis for the state to see whether or not that exists in the state."

Do you recall giving that answer, Dr. Hofeller?

- A I do.
- Q In your report you did not look at election history or voting patterns within each of the challenged districts, [727] correct?
 - A That's true, I did not.
- Q Okay. And in your report you did not look at voter registration information in the challenged districts, correct?
- A I would say that's correct, but I would qualify it a little. Again, Virginia just has vanilla type registration. There is no registration by party, nor is there registration by race, which is broken down in other states.
- Q Okay. Fair enough. And in your report though, Dr. Hofeller, you did not look at voter turnout information in the challenged districts, is that correct?

- A That's correct.
- Q Dr. Hofeller, I believe you testified on direct that in order to do racially polarized or racial bloc voting analysis, that you would have used primary elections, is that fair?
- A I think my answer is a little more qualified than that. My problem with the racial bloc voting study that was presented by your witness is that it looked at statewide elections in even numbered years. And it was really determining how the minorities voted as compared to the nonminorities for, in this case, I believe the Democratic party's nominee. It was a partisan bloc voting [728] study.
- Q Okay. But I think you testified, and correct me if I'm wrong, in order to determine the minority community's ability to elect in a given district, that you would need to look at primary elections for the House of Delegates race, is that correct?
- A Again, I think the term you used to pose that question is not really clear to me. The ability to elect is kind of ability to elect what?

So I wasn't referring to -

Q Why don't I -

A I don't believe I referred to the ability to elect in my study.

JUDGE PAYNE: Please give him a chance to finish his answer. And maybe you could get there more directly if you didn't ask what he testified to. We've kind of kept up with that. And just ask him the question you want to ask, and it may go a little easier for you.

MR. SPIVA: Will do, Your Honor.

BY MR. SPIVA: (Continuing)

- Q Had you completed your answer, Dr. Hofeller?
- A I believe so. I think I've forgotten the question at this point.
- Q So you would have looked at primary elections in order to determine the minority community's ability to elect [729] their preferred candidate of choice, to clarify my last question?
- A Again, I'm not sure I would use the same terminology that you used. But one of the issues that is involved in looking at minority districts is can the preferred candidate of choice of the community get nominated.

Once you have a Democratic and Republican nominee and you're looking at those general election figures, you're just really looking at what the preferred party of choice is. You're not really looking to see who that candidate is. And that's, I think, where there is a little bit of a misnomer here in using those terms.

Does that answer your question?

- Q Well, I think in part. I take it from that though, then you would, if you were trying to determine the minority community's preferred candidate of choice ability to elect their preferred candidate of choice, you would look to primary election data, correct?
- A No. I think I would use primary election data to determine racial bloc voting, which I think in my mind is somewhat different from performance. Performance is something you might measure after the plan has been done and see if it will perform.

Well, what these reports have all shown is that in the 12 challenged districts, Democratic nominees have

no [730] problem getting elected, getting a big majority of the votes in those districts. But that doesn't really signal a preferred candidate. It's preferred party nominee.

- Q You would look to primary elections to determine the extent of racial bloc voting, correct?
- A If you're talking about the preliminary analysis maybe, yes.
- Q Okay. But you are aware that there is very limited data for primary elections for the 12 challenged districts, correct?
- A I think that's precisely correct, and that's the problem. There isn't enough data to do that analysis. It's very difficult. There are very few contests. You have to determine whether they were true contests.

So in my mind, you can't really do that study. So turning to general elections is a very poor substitute because it doesn't prove what you're trying to find.

I'm not sure that if you look somewhere in Virginia in those areas you might be able to find some of that data.

- Q Let me ask you, you would agree that Section 5 of the Voting Rights Act does not require the maintenance of a rigid black voting-age population percentage in a majority-minority district from one redistricting cycle to the next? You would agree with that?
 - A I would agree that that is not necessary.
- [731] Q And let me turn your attention or let me ask you questions about compactness briefly here.

You agree that the Reock and Polsby-Popper tests for compactness are familiar to courts, correct?

- A Yes.
- Q And that they are widely cited by courts, correct?
- A Actually, I haven't read all the cases, so I don't know how widely cited they are. But when compactness comes up in a detailed manner, those are the compactness measures that we usually see, that I've seen.
- Q And in forming your opinion concerning the compactness of the 2011 map, the Reock test and the Polsby-Popper test, those two tests were the primary ones that you relied upon in forming your opinions, correct?
 - A I think they were the only ones I relied upon.
- Q Fair enough. You did not use the Boyce-Clark measure of compactness, correct?
- A No. Dr. Katz used a modified Boyce score, but not the exact Boyce score.
 - Q But you did not use that measure, correct?
 - A That's correct, I did not use it.
- Q Now, you mentioned that there is some difficulties or complications with drawing compact districts in Virginia because the Commonwealth is irregularly shaped to begin with.
- [732] Is that a fair statement of what your opinion is?
- A I think that was the opinion that I wrote in my report. I don't know that I testified to that exact thing in my testimony here today.
 - Q Okay.

A It's of course nice if your state is square like Colorado or Wyoming. But also, there is another factor that influences compactness, and that's the way the state is internally organized.

So if you're trying to follow county lines and the counties are irregular in shape, that's really more difficult.

The water really isn't all that difficult except if the water is used as a regional boundary, like the three major river estuaries, the James, the York, and the Rappahannock River, and of course Chesapeake Bay.

So how you navigate the districts up and down those rather closed areas is a compactness issue.

- Q Okay. And you would agree with me, Dr. Hofeller, that all those factors you just mentioned about the James River and the Chesapeake Bay and the irregular shape, that those have not changed in the past ten years with respect to Virginia, correct?
- A Well, certainly the natural features of Virginia and the state and county boundary lines have not changed for a [733] long time in Virginia.

How the legislature wishes to honor them or stay within them may have changed. I don't know what the – I don't believe I know what the criteria statements were in '91 and 2001.

- Q But the irregular shape of Virginia and the waterways that you mentioned, to the extent those are a constraint on the construction of compact districts, they were a constraint in the benchmark plan as well, correct?
- A Again, I would have to say yes, except with the caveat that it depends on the extent to which the drafters of the 2001 plan honored those same

geographic features. Obviously, the state's boundary is the same and the county boundaries are the same.

MR. SPIVA: I have no further questions, Your Honor.

JUDGE PAYNE: All right. Any redirect?

MS. McKNIGHT: Yes, Your Honor. Pardon me, Your Honor, I will just take a moment, and then I will be very brief.

REDIRECT EXAMINATION

BY MS. McKNIGHT:

Q Dr. Hofeller, in your review of the different maps over the years in 2001 and 2011, were there any crossings [734] of the James River in the 2001 plan?

A Yes.

Q And were there any crossings of the James River in the 2011 plan?

A No. At least not as far as Hopewell, which is the estuary, I would say, the tidal region.

MS. McKNIGHT: Your Honors, I have no further questions. And we also have no further witnesses.

And with the exception of one housekeeping matter, we're prepared to rest. Could I address that matter now?

JUDGE PAYNE: Yes.

MS. McKNIGHT: Last week -

JUDGE PAYNE: And may the witness step down? Is he through?

MS. McKNIGHT: Oh, sure. Yes.

JUDGE PAYNE: Thank you very much.

JUDGE LEE: Thank you for coming.

JUDGE PAYNE: We appreciate your testimony. And you are excused. Thank you, sir.

THE WITNESS: Thank you, my pleasure.

NOTE: The witness stood down.

JUDGE PAYNE: Yes, Ms. McKnight.

MS. McKNIGHT: So last week we offered that docket number 83, which is the factual stipulation in this [735] case –

JUDGE PAYNE: Right.

MS. McKNIGHT: We offered that as a joint exhibit. We have discussed with plaintiffs, and 83 has an attachment to it which is located at docket 85.

So when we prepare this exhibit and provide it to the Court, we'll be combining docket number 83 and docket number 85, which, among other things, includes a timeline.

JUDGE PAYNE: Okay. So they are the stipulations now, is that right?

MS. McKNIGHT: Correct.

JUDGE PAYNE: Do you agree with that, Mr. Hamilton?

MR. HAMILTON: We do, Your Honor.

JUDGE PAYNE: All right. Then that will be done.

MS. McKNIGHT: Thank you, Your Honors.

JUDGE PAYNE: We look forward to having it. Now you have a rebuttal witness, I believe you said, Mr. Hamilton?

MR. HAMILTON: We do, Your Honor.

JUDGE PAYNE: Wait just a moment.

MS. McKNIGHT: I'm sorry, Your Honor. Okay. Both of those items, I just wanted to make sure, are part of our case. They are part of our –

JUDGE PAYNE: I think they are part of [736] everybody's case.

MS. McKNIGHT: Right.

JUDGE PAYNE: Okay.

MS. McKNIGHT: Thank you.

MR. HAMILTON: Just for the record, Your Honor, joint Exhibit 1 is the deposition designations that the parties have worked on jointly together prior to the trial starting.

I do have a witness, Your Honor. Before I call that witness, I would like to clean up something that we had sort of taken out of turn at the end of last week. And that is, you will recall there were two documents.

The authenticity of those documents had been objected to, so we called Mr. Hebert to the stand to lay the foundation for the documents.

They have both been authenticated now. I believe the authentication objection has been withdrawn, but I believe there is also an admissibility objection.

So I would like to offer those at this time. And I have copies for the Court so you can see what it is we are looking at.

JUDGE PAYNE: Exhibit numbers?

MR. HAMILTON: They have not been marked by exhibit number.

JUDGE LEE: I think we should mark them for [737] identification so we know what we're talking about.

MR. HAMILTON: Yes, sir, 69 and 70.

JUDGE LEE: All right. For identification.

MR. HAMILTON: So with apologies to the Court, we have hand marked them, the two exhibits, Exhibit 69 and Exhibit 70. Exhibit 69 is –

JUDGE LEE: Just one second. The judges don't have them yet.

JUDGE PAYNE: While she is doing that, 60 is a – 69 is a fax cover sheet and attaching a letter from Senator McEachin to the addressee, Mr. Hebert, who testified the other day?

MR. HAMILTON: That's correct, Your Honor.

JUDGE PAYNE: 70 is an e-mail from somebody named Robert Berman to a number of people?

MR. HAMILTON: Correct, Your Honor. It's actually, the underlying e-mail is the relevant one, the e-mail from Mr. Hebert who testified on Thursday, and it's addressed to individuals at the Department of Justice.

JUDGE PAYNE: Attached to that is a voting rights analysis, attached to the second and subsequent pages of 70, right?

MR. HAMILTON: Correct.

JUDGE PAYNE: All right. So you're offering it?

MR. HAMILTON: I am, Your Honor.

[738] JUDGE PAYNE: And do you object to it?

MR. BRADEN: Yes, we do, Your Honor.

JUDGE PAYNE: And the objection is what?

MR. BRADEN: Well, it is obviously hearsay unless they have someone who can come and testify in regards to the document as to what is contained in it.

I am assuming they are planning on using it, I guess, for impeachment, but it in fact does not impeach a statement made by any witness. It is clearly not a submission by the State of Virginia. On the very front of the document, it's a comment. And it does not impeach the notion that nothing is ever done in advance.

The report has no date. But if you read the very first sentence of the Lisa Handley report, it's crystal clear this was done after the plan was passed.

So there is nothing inconsistent whatsoever with what's in the record.

JUDGE PAYNE: Is that your way of saying that your objection is to relevance?

MR. BRADEN: Yes, to relevance.

JUDGE PAYNE: Okay. Objection is to relevance and hearsay. What relevance does it have?

MR. HAMILTON: Your Honor, the representation was made by several witnesses that they weren't aware of any racial bloc voting analysis done at any time in the state [739] of Virginia in connection with – of course, they have also disputed that the racial bloc voting analyses are not done in advance or in connection with the actual redistricting itself. I will address that in a moment with a different witness.

But this is simply addressing the first point, that racial bloc voting analyses are these odd, esoteric things apparently done in universities unconnected from the actual redistricting process, which is –

JUDGE PAYNE: So you're offering it to impeach whom?

MR. HAMILTON: I'm offering it to impeach Delegate Jones.

JUDGE PAYNE: Jones.

MR. HAMILTON: And I'm offering it -

JUDGE PAYNE: He said he wasn't aware of any.

MR. HAMILTON: Correct. And he said he didn't think that there was any that had been done.

JUDGE PAYNE: So he is not aware of any. How does this impeach him?

MR. HAMILTON: It – well, it demonstrates that not only racial bloc voting analyses are done in connection with preclearance Section 5, but they were done in 2011 in the state of Virginia.

JUDGE PAYNE: What it shows is that somebody in [740] the Senate had one done, right?

MR. HAMILTON: And submitted it –

JUDGE PAYNE: After it was done.

MR. HAMILTON: Correct.

JUDGE PAYNE: And you say that impeaches Jones?

MR. HAMILTON: I believe it is relevant and does tend to impeach Mr. Jones and the other experts who have testified, including Dr. Katz, about the frequency with which racial bloc voting analyses are prepared and submitted to the Department of Justice in connection with Section 5 preclearance.

JUDGE PAYNE: Anything else?

MR. HAMILTON: Yes. I don't believe the hearsay objection stands for two reasons. First, it's a business record. These were produced by the Virginia State Board of Elections. You can tell that from the Bates stamp number. VSBE means the Virginia State Board of Elections in this litigation. They were prepared in the ordinary course and maintained by the Department of Justice.

So they are records kept in the ordinary course of business within the meaning of Federal Rule of Evidence 803(6).

JUDGE PAYNE: Did some witness establish that?

MR. HAMILTON: I believe Mr. Hebert did. He established that the documents were prepared and submitted [741] to the Department of Justice.

JUDGE PAYNE: Yes. All right. Anything else?

MR. HAMILTON: Yes. Finally, they're not offered for the truth of the matter asserted. There are lots of assertions in here, including the black voting-age population of the Senate districts and so on.

We're not offering to prove the contents of the report. Simply it's a very small point, and that is these reports were done and they were submitted.

JUDGE PAYNE: These were part of your case in chief?

MR. HAMILTON: I believe – well, no. Actually, we had taken them out of turn. So I believe they are actually part of the rebuttal case, but I'm happy –

JUDGE PAYNE: I thought you reopened the case to put them back in. So it's out of turn for your reply case.

MR. HAMILTON: Yeah, but I'm happy to have them admitted in either case, Your Honor.

JUDGE PAYNE: All right. Objection sustained on the basis of lack of relevance to anything that is at issue in this case.

MR. HAMILTON: Thank you, Your Honor, for considering it. At this point –

JUDGE PAYNE: That is 69 and 70. So both are [742] objected over – excuse me, rejected over objection.

MR. HAMILTON: Thank you, Your Honor.

At this point the plaintiffs call Dr. Stephen Ansolabehere.

JUDGE PAYNE: Doctor, I remind you you're under the same oath that you took earlier in these proceedings, you not having been excused. Thank you very much. You may have a seat.

STEPHEN ANSOLABEHERE,

a witness, recalled at the instance of the plaintiffs, having been previously duly sworn, testified a follows:

DIRECT EXAMINATION

BY MR. HAMILTON:

Q Good afternoon, Dr. Ansolabehere. Let's start with the correct pronunciation of your name. I think we've heard it about five different ways.

How do you pronounce your last name?

- A Ansolabehere.
- Q And is that Basque in origin?
- A Yes.
- Q All right, thank you. You will correct me if I mispronounce it, I'm sure.

- A I've given up on correcting people.
- [743] Q You have been sitting in the courtroom during the course of this trial, correct?
 - A I have.
- Q Okay. Let's start with compactness. Dr. Katz testified that he prefers the Boyce-Clark measure for compactness.

Do you recall that testimony?

- A I do.
- Q What is the ideal shape for a district as measured by the Boyce-Clark measure?
- A The ideal shape of a district under Boyce-Clark is a circle.
- Q Okay. Dr. Katz' objection, or one of them, to the use of Reock or Polsby-Popper was the tile theorem.

Do you recall that discussion in his report?

- A I do.
- Q Does that same problem exist with respect to the Boyce-Clark measure?
- A Yes, in the sense that if you have if you get to the ideal shape under Boyce-Clark, you get to a circle. So it's the same issue.
- Q So why did you select Reock to use in your report?
- A Reock is the standard, it's probably the most commonly used indicator in court cases that I've seen, and also in academic research on this issue, along with Polsby-Popper.
- [744] Q All right. What was the Reock score of the original gerrymander?

- A .19.
- Q I'm sorry?
- A .19.
- Q Dr. Hofeller just a few moments ago talked a little bit about compactness. As you were listening, did he offer any statistical analysis in his report?
- A No. He offered a set of numbers, but he didn't do any statistical analysis.
- Q And that is a statistical analysis of the relative compactness of the various districts?
- A Correct. Where you might do a test comparing the two.
- Q Did he offer a statistical analysis or a test comparing the two in his testimony in this court?
 - A No.
 - Q Did you?
 - A I did in my reply report.
 - Q And what did it show?
- A I compared the distribution of compactness scores under the 12 challenged districts, and compared that to the distribution of compactness scores in the 88 other districts, and found that there were statistically significantly different distributions for each of the scores, Reock, Polsby-Popper, and Schwartzberg.
- [745] Q So what does that tell us? The difference, what does it mean to be statistically significant?
- A That means that the chance of these differences occurring just arbitrarily or by happenstance is less than 5 percent.

So 95 percent of the time if you drew maps with compactness in mind, 95 percent of the time you would expect to observe differences in compactness of this large – this much or larger if these districts were being treated differently than other districts in the map.

- Q And Dr. Hofeller testified that we look at compactness sort of as a flag. Do you agree with that?
 - A Correct.
 - Q And what's it a flag for?
- A It's a flag to call your attention to maybe something irregular happened over here and for closer examination of what might have occurred. Look at calls for looking at the demographics, political performance of the districts, and so forth.
- Q All right. Now, let's switch gears to a different topic. We have heard various testimony about different ways of calculating the black voting-age population.

Do you recall that?

- A Yes.
- Q Do you work with census data professionally? [746] A I do.
- Q Do you work with the Department of Justice?
- A I do.
- Q Can you explain what your interface with the Department of Justice is and when.
 - A I am the Department of Justice's expert in

the Texas voter ID case both under the Section 5 proceedings and under the Section 2 proceedings.

- Q They have hired you to be the expert witness for the Department of Justice?
 - A Correct.
- Q Okay. Are you familiar with the way that they use black voting-age population and calculate it?
 - A I am.
- Q Okay. Can you explain how black population data is collected or African-American population data is collected for the purposes of the United States Senate census. Sorry. Census.
- A When the census enumeration is sent to every household, the questionnaire contains a question for race and a question for ethnicity.
- Q Okay. So let's focus just on the race piece. What are the choices that a citizen is asked to fill out when they are asked about their race?
- A Under race, you are asked if you are white, black, [747] Asian-American, Pacific Islander, or native American. Other race, you can fill in whatever you would like to say. Or multiple races, and you can identify different racial categories.
- Q And when the census data is released, what is the black population or black voting-age population, what is that number?
- A That number is anyone who identified themselves as black according to that racial question.
- Q Okay. Now, we also heard about ethnicity. How is that that's a second question?
- A Second question is ethnicity, and it concerns Hispanicity, are you Hispanic or not.

- Q And how does that relate to the black voting-age population number, if at all?
- A Well, when Census releases its data sets to the states for purposes of redistricting and other voter rights questions, some states have large Hispanic populations and also large black populations, and there has to be a careful accounting of how blacks and Hispanics are treated say in different part of the state.

Florida, Texas, and California all have pretty substantial black populations that are both black and Hispanic.

If you're constructing a black district, you would [748] want to pay attention to the black numbers. But if you are constructing a Hispanic district, you would want to pay attention to that second question, which is Hispanicity, and you might want to distinguish black Hispanics from non-black Hispanics.

And that's why Census creates this separate category of black Hispanics. And I realize it can be confusing if you are looking at the data to get the columns right and do the addition of the columns correctly.

- Q So for the purposes of let's say, for example, your expert testimony on behalf of the Department of Justice in the Texas case, what number would you look at to determine the black voting-age population?
- A I would look at black people who consider themselves black on that first question without regard to the Hispanicity question.
- Q Is there any difference between that number and the number reported by the Department of Legislative Services in Virginia?

A No.

Q It's the same?

A Yep.

Q Does it matter whether you use –

JUDGE PAYNE: Which numbers are they?

MR. HAMILTON: I'm sorry?

[749] JUDGE PAYNE: Between which number and the one used by the DLS?

BY MR. HAMILTON: (Continuing)

Q The number reported as to the black voting-age population reported on the census information to the Department of Justice and DLS.

A The Census provides the entire questionnaire, and the entire data set has many columns in terms of what's provided.

What counts as black voting-age population from the perspective of analyses of DOJ is consistent with what DLS presented in terms of the black voting-age population.

- Q Does the number somehow change when you look at it through the software program we've heard talked about called Maptitude?
- A No, the program is not relevant. You have a database, like Excel or something, you upload your data into it. It doesn't matter which software program you're using.
- Q Does it matter if you're using a software program called AutoBound?
- A No. This is just a question about which fields or columns in the spreadsheet you're looking at.

Q Okay. Let's take a look at, to maybe help clarify this, Exhibit 47. We'll call it up on the screen. I know it is very, very small, and I apologize for that. That's [750] the data. We're looking specifically at page 7.

Can you with your hand maybe circle where it is that you would find the black voting-age population?

JUDGE PAYNE: What is this?

Q Well, this is part – well, Dr. Ansolabehere, can you identify what this document is?

A It says HB 5005, passed April 28, 2011, House plan voting-age population.

Q This is an excerpt from the Commonwealth of Virginia's report to the Department of Justice in connection with its preclearance of the 2011 plan, correct?

JUDGE LEE: What page?

MR. HAMILTON: We're looking at page 7 specifically.

JUDGE LEE: Thank you.

MR. HAMILTON: But we're really just looking at the form at the moment.

JUDGE PAYNE: But it is Exhibit 47?

MR. HAMILTON: It is Exhibit 47. It's in evidence. It's just an excerpt from the preclearance submission, Your Honor.

BY MR. HAMILTON: (Continuing)

Q So where would you look if you wanted to see the black voting-age population?

A Percent BVAP.

[751] Q Okay. And if you mark that on the -

- A Marked the top of the column, yeah.
- Q Okay. For the record, can you count the columns over so you could tell us which column it is, or maybe read the heading of the column?
 - A It says: Percent VAP Black.
- Q Percent Black VAP. Maybe move a little closer to the
 - A Percent VAP Black.
- Q There you go. Thank you. Now, have you had an opportunity to review Exhibit 47 and the numbers reported on this spreadsheet for each of the 12 challenged districts?
 - A I have.
- Q And are they all above 55 percent black votingage population?
 - A They are.
- Q Okay. And you have confirmed that. So let's just look at one. On this page, I think you can see House District 63, is that right?
 - A Correct.
- Q And what's the black voting-age population there?
 - A 59.5.
 - Q Okay. Thank you, sir.

JUDGE PAYNE: Before you go any farther, I need [752] to understand something. Excuse me for interrupting.

But there has been some testimony that DLS used a population, a black voting-age population that included Hispanic voters.

Are you saying that that did not occur?

THE WITNESS: I don't know exactly what that testimony was referring to because I didn't have the data that they were looking at before me.

JUDGE PAYNE: But apart from that, are you saying that your understanding of this figure that was prepared by DLS, when it says BVAP, does not include Hispanics?

THE WITNESS: Their data include white includes Hispanic, black includes Hispanic, Asian includes Hispanic, because they are separate questions, they are just separate columns.

BY MR. HAMILTON: (Continuing)

Q So if you wanted to know the numbers –

JUDGE LEE: I don't think you answered his question.

A So BVAP includes Hispanic. White VAP includes Hispanic. Asian VAP includes it. Because Hispanic is a separate question.

JUDGE LEE: He's asking about this chart.

THE WITNESS: Right.

JUDGE LEE: Does this chart include in black BVAP [753] Hispanic?

THE WITNESS: Correct. Because anybody who identifies as black on the racial question is counted as black, regardless of how they answered the Hispanic question.

Similarly, anyone who answers white is counted as white regardless of how they answered the Hispanic question.

JUDGE LEE: So you're saying the Hispanic and black numbers are double-counting?

THE WITNESS: Yes. If you wanted to get a complete separation of those, you would create another category of black Hispanics, black non-Hispanics, white Hispanics, white non-Hispanics, Asian Hispanics, Asian non-Hispanics. You would have to go through and separate each of those.

JUDGE KEENAN: So are you saying then that the Department of Justice's designation of BVAP includes Hispanic black, and that DLS's does likewise? Is that what you're saying?

THE WITNESS: Correct.

JUDGE KEENAN: You're saying that both metrics include Hispanic blacks?

THE WITNESS: Right. When the Department of

Justice considers the performance of districts and the [754] racial composition of districts and the question is whether it is a black district, they look at black voting-age population, black Hispanic – people who – regardless of how people identified on the separate ethnicity question.

JUDGE LEE: So was there any real difference between what Delegate Jones said about 55 percent on the floor and what was submitted to the Department of Justice?

THE WITNESS: I'm not sure I completely understand the question, but –

JUDGE LEE: Much has been made of the 55 percent being a rule. There were statements on the floor about all the districts north of 55 percent.

My question is whether the 55 percent in this submission to the Department of Justice, that's the same number that they were talking on the floor, is that right?

THE WITNESS: That's my understanding.

JUDGE PAYNE: In your study of the record in this case, do you understand that the percent BVAP stated in this Exhibit 47 is the same number, the same percentage number as what Delegate Jones called DOJ BVAP or DOJ black?

THE WITNESS: I heard Delegate Jones refer to a 54 percent number. I don't know exactly which number that was because I don't know what columns in the spreadsheet [755] he was referring to.

My interpretation of that is he was likely looking at a separate column that is distinguishing people who consider themselves black and non-Hispanic and black and Hispanic, but that's –

JUDGE PAYNE: Do you remember the testimony about the Intervenor-Defendants' Exhibits 56 and 57?

THE WITNESS: I don't remember exactly which 56 and 57.

JUDGE PAYNE: Can you put them up for him? Well, I tell you, we'll do that later. Somebody needs ultimately to sort out what I perceive to be a difference, and maybe the others don't.

But I understand that the black DOJ figures are slightly different than the DLS black figures are. And you all have made a lot of it in cross-examination, and nobody has – and now he says they're the same. So I'm confused.

MR. HAMILTON: Well, I think –

JUDGE PAYNE: So maybe you can do that in your questioning or –

MR. HAMILTON: I will try.

JUDGE PAYNE: Maybe you will have to do it in your argument, but we'll see.

MR. HAMILTON: Well, I will try both.

[756] BY MR. HAMILTON: (Continuing)

- Q Dr. Ansolabehere, the numbers that are reflected on this spreadsheet were the numbers utilized by the Commonwealth of Virginia to report to the Department of Justice for the purpose preclearance what the black voting-age population was in each of the 12 districts, correct?
 - A Correct.
- Q So regardless of what DLS may or may not have done, this was the number the Commonwealth reported to the Department of Justice?
 - A Correct.
 - Q And in every case it was above 55 percent?
 - A Correct.
- Q And that's consistent with everything that Delegate Jones said on the floor in the transcripts that we've heard about in this courtroom, correct?
- A That's consistent with everything I heard about the floor testimony.
- Q All right. In your experience, your professional experience in calculating black voting-age population for the purposes of doing any of these kinds of racial bloc voting analyses, is this the number that you use?

- A Yes, I would use the percent black voting-age population where it's just looking at the racial question.
- [757] Q Sure. And when we're looking at black Hispanic I'm sorry, black voting-age population for Section 5 purposes in a state in which that's the relevant question, do you even care about the Hispanic the answers to the Hispanic number? Is that relevant?
- A If you were the only time the Hispanic would come up is if you had a question about whether you were creating a majority-minority district where it was black plus Hispanic. But in this case, they're all majority black districts.
 - Q So is it relevant to the analysis?
 - A No.
 - Q The answer to that question, do we even care?
 - A No, not as not for this analysis.
- Q And okay. Let's move on. And I hope I've answered the Court's questions. If not, I will try –

JUDGE LEE: The testimony is before us. Thank you very much.

MR. HAMILTON: Thank you.

JUDGE PAYNE: We will get into that a little bit later.

MR. HAMILTON: You got two different answers. Thank you.

BY MR. HAMILTON: (Continuing)

Q Let's switch to some data issues. Dr. Katz testified [758] that he and his teaching assistants had

some difficulty in replicating the data set that you used.

Do you recall hearing that testimony?

- A I heard that.
- Q Did he raise that point in his report?
- A No.
- Q Did he ask you for assistance or clarification?
- A No.
- Q Did he ask you for the data?
- A No.
- Q Did Dr. Hood have any trouble with replicating the data set, to your knowledge?
 - A No.
 - Q He didn't report any in his report, did he?
 - A No.
- Q Where would you be able to find this data? Was it publicly available?
- A I posted the data at the election data archive at Harvard's Dataverse.
 - Q What is that?
- A I manage a large data archive of election data where we've taken all the census data and merged it in at the precinct level or voting tabulation district level to all of the election data. So you can access the census and election data for every state in the United States. That [759] archive was started in 2008.

JUDGE LEE: How do you find it?

THE WITNESS: You can go to Dataverse, I think it's .iq.harvard.edu.

JUDGE LEE: Can you say that faster?

THE WITNESS: If you just – actually, just get in Google and type Harvard election data archive Dataverse, and you should get there.

JUDGE PAYNE: You don't need a password?

THE WITNESS: No, it's publicly acceptable, free to the universe.

BY MR. HAMILTON: (Continuing)

- Q You mentioned that in your deposition?
- A I did.
- Q Who funds that data archive?
- A The Sloan Foundation, Pew Foundation has provided us some funds, and the Dean of the College of Dean of the Faculty of Arts and Sciences at Harvard.
 - Q And what's the purpose of it?
- A The purpose is to provide free publicly available data for purposes of analyzing elections. It helps the academic community. The New York Times has used it. CBS News has used it. Huffington Post has used it. Other people who do graphics and so forth, info graphics, rely on it just to make maps and do analyses.
- [760] Q Is it something you utilize professionally in the normal course of your work?
 - A Yes, I do research using it.
- Q How many downloads have there been from that archive?
 - A I think about 80,000.

- Q Anyone complain about data integrity issues?
- A No. Every once in awhile we will get some questions about how to use data or possibly a corrupted file. We fix the file and put it back up.
- Q Okay. So Dr. Katz could have looked there if he had wanted to?
 - A I believe so.
- Q Now, Dr. Katz and I believe Dr. Hofeller this morning have suggested that the real election in the House of Delegates elections is at the primary level, and we ought to be and that you've made a mistake because you looked at the wrong elections and you should have been looking at the primary elections.

Do you recall that testimony?

- A Yes.
- Q I think Dr. Hofeller called it the wrong data this morning. Do you agree with that?
 - A Do I agree with which?
 - Q That you were looking at the wrong data?
 - A No.

[761] Q Why didn't you look at the primary data?

A There are almost no contested primaries in these 12 challenged districts. I looked up online at the Virginia State Board of Elections when I started this project, the number of primary contests and general elections contests in House of Delegates elections, and found that from 2001 to 2013, so under the old plan and under the current plan, there were only 12 challenged primaries, I believe, over the entire 12-year period. That is about one challenged primary per district.

- Q Over which period of time?
- A 2001 to 2013.
- Q Is that enough data to do a meaningful analysis?
- A No. Most of the districts had no challenged primaries.
- Q Okay. Now, Dr. Hofeller this morning said you weren't really doing an analysis to identify the candidate of choice, you were just doing a partisanship analysis.

Do you agree with that?

- A No. I think what I do is a standard sort of analysis to identify candidate of choice in different elections.
- Q And how does that identify the candidate, the candidate of choice for the minority population?
- A It asks for each election studied which candidate was chosen by a majority of the minority population.
- [762] Q And is this regression analysis that we talked about earlier?
 - A Yes.
- Q And is that able to sort out the difference between race or to identify the minority party candidate of choice?
- A Correct. For each election I would do a separate analysis asking for each election which candidate was the preferred candidate of the minority majority of the minorities.

So most of the time 90-plus percent of the blacks preferred the Democratic candidate.

- Q And how about the whites, did they have a similarly consistent preference for a single party?
 - A No.
 - Q Was did you observe variation?
 - A Yes.
 - Q What was the range of that variation?
- A The range of that variation ranged, it went from about 35 percent of the whites in some districts preferred the Democrat to the Republican to about 75 percent in some districts, about 75 percent of the whites referred the Democrat to the Republican.

JUDGE LEE: Which part of Virginia was that? Really, I mean, the Virginia legislature has been [763] Republican for years. What district are you talking about?

THE WITNESS: I would have to look up the exact table, but I think one of – some of the Richmond districts had that characteristic.

JUDGE PAYNE: That's just Richmond, is that what you're saying? I didn't understand that.

THE WITNESS: I think some of the Richmond districts had very high white vote for black preferred candidates. I think it was down in the Greensville and Dinwiddie areas that we saw the whites preferring the opposite candidate. So that's where, I think it was 63 and 75 is where I saw the lowest amount of white support for the black preferred candidate. And up in the Richmond area in the city –

JUDGE LEE: No, my observation had to do with your saying that 75 percent of the whites preferred the Democratic candidate. Which part of Virginia is that?

THE WITNESS: Again, I would have to look at the report to look at which districts it was in, but –

MR. HAMILTON: We are just going to get the report here. I will put it up on the screen in just a moment.

BY MR. HAMILTON: (Continuing)

Q But while they're doing that, one of the criticisms [764] that we heard this morning from Dr. Hofeller was that you were only looking at even year elections, which are different than the odd year elections for the House of Delegates.

Do you recall that?

- A I do.
- Q And is that an accurate statement by Dr. Hofeller this morning?
- A No. I also looked at the governor in 2013, which is an odd year election. And there was a House and Senate, House of Delegates and Virginia Senate election at the same time.
- Q So what were the four elections that you looked at in doing your analysis?
- A U.S. President in 2008. U.S. President in 2012. U.S. Senate in 2012. And governor in 2013.
- Q And which of those were done on even years? Which of those elections were held on even years?
- A The first three, the two presidential elections and the U.S. Senate election.
 - Q And one of them was held in an off year?

- A Correct.
- Q Okay. Did you also look at the attorney general or lieutenant governor race?
 - A No.
- [765] Q Did you examine them and then discard them, or just never look at them at all?
- A I did examine them. For each of these offices, I looked at the relationship and the correlation and the mean value for the vote share for the Democratic candidate compared to the vote share for the Democratic candidate in House of Delegates elections in each area. And I found in each of these districts there is a high correlation where there was contested House of Delegates elections between the vote for each of these offices, the ones that I studied, and the House of Delegates election.
- Q So the purpose of that was to try and determine using this other set of statewide elections whether those closely aligned or did not closely align with contested House of Delegates elections? That's what you were looking at?
 - A Correct.
- Q And your conclusion was that they closely aligned?
- A The ones that I studied did. Lieutenant governor and attorney general did not, so I did not study those.
 - Q Is that the reason you left them out of the study?
 - A Correct.
- Q Okay. And using that in your professional experience, did you believe that to be an accurate way

of determining the candidate of choice in these elections where we have [766] such limited House of Delegates elections?

A Yes.

Q Okay. Now, you testified a moment ago that there were 12 contested – over a 13-year period, I think you said, there were 12 contested primaries in these 12 challenged districts, did I hear you correctly?

A Correct.

Q How many contested general elections were there?

A Over that same time span from 2001 to 2013, there were 28.

Q Okay. So why didn't you use those 28 House of Delegates elections in order to conduct your analyses?

A A couple of reasons. One is about half the House of Delegates races, House of Delegates seats didn't have any competition. Most of those were concentrated in a couple of those districts.

And also, the voting tabulation districts at stake in the new map didn't always have contestation. So because they had taken like the district from 2009 and reconfigured it, some of the VTDs in the new 2011 map didn't have any competition in 2009 because they were from another House of Delegates election.

So there just was not enough information from the general elections or the primary elections for the House of Delegates to really do an analysis of which candidates [767] were preferred and whether those were performing districts.

Q Now, Dr. Katz testified that he didn't know because he didn't do an analysis to determine whether

the results from the statewide elections correlated with the results from the contested House of Delegates elections data set that he was looking at.

You did that analysis, correct?

A I did.

Q And that's what you just talked about a moment ago, we don't need to go through it again, but there was a real close correlation between the two?

JUDGE PAYNE: Mr. Hamilton, I don't think we need for you to summarize the testimony and then ask if he agrees with it or not. Just ask him the question you want to ask him and then we'll be finished a lot quicker than if you start to testify about what somebody else testified to, if you will, please.

MR. HAMILTON: All right. Thank you, Your Honor.

BY MR. HAMILTON: (Continuing)

Q Dr. Ansolabehere, the table, we put up the results of the ecological inference study done by the intervenors' expert simply for convenience.

So in answer to Judge Lee's question, where was the strong white crossover voting, in which districts? If you [768] could just point that out.

And for the record, this is Intervenors' Exhibit 16 at page 24.

A So up around 75 percent or so, HD 71, that is 72 percent of the whites voting for the black preferred candidate in that race.

JUDGE PAYNE: That's Richmond, is it?

THE WITNESS: In Richmond in 2009. And then in 2013, it is 77.1.

JUDGE PAYNE: That's Richmond again?

THE WITNESS: Yeah. And then again up in the 70's range, the whites in HD 69, bottom row, about 73 percent.

JUDGE PAYNE: Where is that, 69?

THE WITNESS: It's Richmond as well. And then there are other districts which are well above 50 percent. For example, HD 95 in 2013 had 63 percent. That's this – sorry. That's this figure right here, that's in the Hampton area. And so, 69 is also under the old district 67.5.

BY MR. HAMILTON: (Continuing)

- Q All right. Maybe we could just briefly look at the other side. Can you identify where there is really low white crossover voting?
 - A Could you erase the red dots?

[769] HD 75 has, in this analysis, 41.4, right there.

Sorry. And 34.8. That's down in the – south of Richmond in the Greensville area.

- Q All right.
- A Also District 80 has 36 percent.
- Q So this is another way of simply well, what we're looking at here is different voting patterns, different political preferences in different parts of the state, is that right?
 - A Correct.
- Q Let's take a look at Defendant-Intervenors' Exhibit 16, I think it is the same exhibit, at page 19, Figure 9. There is that S-shaped table that Dr. Katz prepared.

Do you recall that testimony?

- A I do.
- Q Now, he testified that the elections in the lower right-hand corner, that all those little dots on the bottom and all those little dots at the top represent elections, and then they're plotted on this chart.

And he testified that the elections in the lower righthand corner represented Delegate Morrissey and Delegate Carr's election. Do you recall that?

- A Yes.
- Q Is that a yes?

[770] A Yes, I recall that.

- Q Are they what's their race, do you know?
- A They are white.
- Q Okay. So are they properly reflected on this table?
- A If this is an analysis of the ability to elect candidates preferred by minorities, candidates preferred by black voters, no.
- Q Where should they have been if that's the purpose of this table, how should they have been reflected on this table?
- A They should be up here. Because they won those elections and they were preferred, according to the ecological inference analysis, they were preferred by large majorities of the minority community.
- Q And how would that affect the S-shaped curve that is plotted by Dr. Katz in this table?
- A Well, I don't have the data before me, so I can't run the analysis, but having done analyses like

this – not this analysis, but having done logit analyses many times over my career, it would shift the curve so that it ran over here somewhere.

I don't know if that's exactly where it would go, but the idea is these values down here, sort of outliers that are dragging the curve down, so they will affect the estimated probabilities. If those get swapped up to being [771] 1s instead of 0s, the probability of electing an African-American preferred candidate will go up out in this – out in this area of the chart.

And that would affect the curve, it would shift the estimated curve this way.

JUDGE PAYNE: So you are moving the curve on Figure 9, keeping it roughly the same shape, but you're moving it to the left margin, is that right?

THE WITNESS: Correct, the same of the function –

JUDGE PAYNE: What would that do to the conclusion of his testimony that at 50 percent BVAP it would take 52 percent of the vote to elect a candidate of choice, in your judgment?

THE WITNESS: It would – say that at 50 percent BVAP, it would take a lower percentage of the vote to elect the candidate. Or at 50 percent BVAP, they would have a higher probability of electing the candidate of choice.

JUDGE PAYNE: What percent of the vote?

THE WITNESS: I don't know exactly because I don't have the data before me to actually estimate the curve.

JUDGE PAYNE: All right. Sorry.

BY MR. HAMILTON: (Continuing)

[772] Q So did this predictive business, this looking into the future stuff of how a new district will perform, is that essential to evaluating whether these House districts will retain the ability to elect minority candidates of choice?

- A Say that again.
- Q Is this predictive analysis of how the new district will perform in future elections, is that essential to evaluating whether these House districts will retain the ability to elect?
- A Some sort of predictive analysis is necessary. Are you referring to Dr. Katz' analysis or something else?
 - Q Just in general.
 - A In general, yes.
 - Q Is there more than one way to do that?
 - A Yes, there are two standard ways to do that.
 - Q Okay. Can you explain the first.
- A The first standard way to do that is to take elections in that area, and they could be all sorts of elections, I looked at those, the four already discussed, and examine what the vote share would be in the reconfigured district. That is, take the voting tabulation districts in the newly configured district and simply calculate what percentage of the vote for say U.S. President or governor, whatever the key election is, would be.

The idea there is, black voters have expressed a [773] preference for this candidate. Do they win a majority of votes in the newly configured districts for the candidates for which they expressed a preference? And that's the first analysis you would perform.

- Q And is that contained in your report, sir?
- A It is.
- Q And before we go to your report, is that similar to what Dr. Hood did?
 - A It is.
 - Q Okay. So which tables is this from your report?
 - A In my original report, Tables 14A and 14B.
- Q Can you explain briefly how we should read what these tables are telling us.
- A This tells you for the elections in question, the election studied in this particular table, what percentage of votes were won by the minority preferred candidate. In this case the Democrat for District 63, 69, 70, et cetera. Those are the rows.

And then the columns are under the benchmark configuration of the district, and under the configuration of the District under HB 5005. The first two columns of calculated numbers are for President 2008. Second two are for President 2012.

- Q And what is your conclusion looking at the population results analyzed this way?
- [774] A In these districts, the minority preferred candidates would win at least 62 or projected to have won 62 percent or more of the vote in every one of these districts, and it ranged from 62 up to 88 percent.
- Q Okay. What's the second one you mentioned there were two ways to look at this. What's the second way to look at it?
- A The second way, which I also provided in my original report and in my reply report, is to take the rather than start with the votes, to start with the

racial composition. Estimate the voting behavior of each of the racial groups. And then based on the racial composition of the district, project or estimate what the vote share would be for each of the elections studied.

- Q And did you do that?
- A Yes.
- Q Is that an unusual form of analysis? A No.
- Q Is this one of the functional analyses that we've heard about as described in the Department of Justice regulations?
- A Yes, both of these analyses would be done as part of a functional analysis for a district.
 - Q Okay.

JUDGE PAYNE: That's not the question. The [775] question was whether they are described or mentioned, I don't know which, in the Department of Justice regulations?

THE WITNESS: I don't know if they are in the regulations, but they are part of the submissions to the Department of Justice.

BY MR. HAMILTON: (Continuing)

Q I think the question was, is this a form of the functional analysis that is described in the Department of Justice regulations?

JUDGE PAYNE: That's not the question. The emphasis there is whether it is described by the regulations. You're talking about whether it's a functional analysis.

MR. HAMILTON: Correct, Your Honor. I didn't mean to ask him is it required by the Department of Justice.

BY MR. HAMILTON: (Continuing)

- Q I just asked, is it a form of functional analysis as described in the regulation?
- A It's a form of functional analysis. I don't know if it is prescribed by the regulations.
- Q And in doing this kind of analysis, you used ecological regression, correct?
 - A Correct.

[776] Q And Dr. Katz prefers ecological inference?

- A Correct.
- Q Which is the standard in the business, or is it just a coin flip between using these two?
 - A Ecological regression is the standard.
- Q And so, when was ecological inference first developed?
- A Ecological inference is also known as the method of bounds, and it was developed in the mid-1970s.
 - Q Has it gained wide acceptance since that time?
 - A No. In part because it is hard to calculate.
- Q What percentage of the analyses in this area uses ecological regression versus ecological inference?
- A I would say about 90 to 95 percent of the analyses that I have encountered use ecological regression.

- Q And which of the methods was utilized in *Thornberg versus Gingles*, if you know?
 - A Ecological regression.
- Q Is ecological inference stable, by the way, as a statistical measure?
- A As a there is an algorithm for calculating it, and it takes, as Dr. Katz testifies, it takes a long time to converge. It takes like six hours sometimes to get a number, one number for one district. So it is very computer intensive.
- Q Dr. Katz criticized your analysis or certain results [777] of your analysis for being out of bounds, and he put up some nice looking tables to try and show that

Did your analyses violate any of the bounds in your study?

- A No.
- Q Can you explain that.
- A So if the predicted the question is about the parameter that comes out of a statistical model versus the predicted value that you would use for doing an analysis. And none of my predicted values violated the bounds.
- Q In this case specifically, you examined Dr. Katz' ecological inference-generated results, right?
 - A Correct.
- Q Did those differ from the ecological regressiongenerated results that you conducted in your original report?
- A As I mentioned in my reply report, the black percentages are different by only a couple percentage

points. I think the average was five percentage points total. And the differences, to the extent that there are any difference, are in the white – among white voters. And those only arose in two House of Delegates districts.

- Q And if the Court wanted to find this analysis later, where would they be looking in your reply report?
 - A I don't remember the exact table.

[778] Q Was that Table 5?

- A That's Table 5 of my original report.
- Q Okay. And which method of reviewing this showed more racial polarization, the ecological inference analysis or the ecological regression analysis?
- A The ecological inference analysis showed less racial polarization. The ecological regression analysis shows somewhat more racial polarization.

In the two districts where we have a difference of results, his analysis, Katz' EI analysis showed no racial polarization, and mine showed some racial polarization.

Q Now, another suggestion we heard last week was that the presence of an American presidential candidate on the ticket somehow distorted the results in the 2008 and 2012 elections.

Do you recall that?

- A I do.
- Q Does it matter?
- A I don't think so. I analyzed the data that's exactly why I was looking at the correlation between the vote share in the presidential, Senate, and

governor election and in the House of Delegates elections in question, just to make sure that there wasn't something unique about one of those elections.

So that if I did all the analysis in terms of one [779] election, I might be skewed, but it didn't affect any of the conclusions.

- Q Now, your choice, the way that you approached identifying what were, for the lack of a better term, the benchmark districts or the benchmark elections that you were going to use to compare voter performance and do your analysis, have you done that before?
 - A Yes.
 - Q Is that something you do for CBS News?
- A Yes. For CBS News we're always looking for what are the benchmark elections that will give us the most accurate prediction of the coming congressional election or the coming Senate election in a given state. We're always looking for which elections, like a presidential election, correlate highly with congressional or lower offices.
- Q And did you use that same method here in selecting elections for their predictive ability?
 - A Yes.
- Q And is it possible to take those election results and project into the future and provide an estimate of how the modified, the new enacted district will perform in the future?
- A In the near future. I wouldn't use it to project say at the end of the decade because of population shifts and [780] so forth. But in the near future.

- Q And when you are creating these predictive models for CBS News, do you ecological regression in that analysis?
 - A Yes.
- Q How accurate have your predictive modelings been over the time that you have been with CBS News?
- A I started with CBS, working at CBS in 2006. And I handle Senate and congressional elections, as well as presidential. And so far, we haven't missed a state or a district.
- Q Now, there has been some suggestion last week that the racially polarized voting analysis is somehow unusual in connection with redistricting even in states governed by Section 5.

Do you recall that testimony?

- A I do.
- Q Do you agree with that testimony?
- A Which part of it?
- Q That it is unusual, that racially polarized voting analyses are unusual and rarely done?
- A My experience in this area is that racially polarized voting analyses are done commonly in assessing the performance of plans.
- Q And in what specific states are you familiar with racially polarized voting analysis being done in [781] connection with redistricting in the states covered by -

JUDGE PAYNE: That wasn't what he answered, Mr. Hamilton. What he answered was that it was done in connection with performance.

Now you're talking about drawing, and those are two different things. So –

MR. HAMILTON: How about if I ask him both?

JUDGE LEE: One at a time.

JUDGE PAYNE: Just one would be good.

BY MR. HAMILTON: (Continuing)

Q All right. Well, let's start first, are you familiar with how often racially polarized voting analyses are done in drawing maps during the process of doing redistricting itself?

A I only know of a couple of situations where I know what they were actually using and looking at.

Q Okay. Can you explain what those are?

A Well, I know Massachusetts because I was involved in bidding for that, and they were looking for a racially polarized voting analysis as well as basic data provision.

I know that the city council elections in New York used racially polarized voting analysis as part of their process.

I believe that Texas, from everything I heard at various trials there, used racially polarized voting [782] analysis during the process of districting, but that was a long process.

Q Okay. How about after the fact in connection with Section 5 preclearance submissions to the Department of Justice, are racially polarized voting studies often utilized in preclearance submissions?

A My understanding is that it's standard. So it is very common.

- Q And in addition to Texas, Massachusetts, New York, are you familiar with any other states in which racially polarized voting analyses have been submitted to the Department of Justice?
- A Off the top of my head, I couldn't list them, but
 - Q Arizona?
 - A I do know that Arizona had one. It was –
 - Q How about Virginia?
- A I learned from in the context of this trial that there was something submitted in Virginia, but –
- Q Without doing some analysis of the extent of white crossover voting, is it possible for the General Assembly to determine whether the modified district preserved the ability to elect of the minority community?
 - A Could you rephrase that question?
- Q Without doing some analysis of the extent of white crossover voting, could the General Assembly determine [783] whether the modified district preserved the ability to elect?
- A You'd need to you'd need to know how all the racial groups were voting if you were going to take the second sort of analysis that I pursued.

You could do the first sort of analysis and look at the reconfigured votes in different elections if you had done a racially polarized voting analysis and knew who the preferred candidates were of the minority.

JUDGE PAYNE: We will take the lunch recess at this time.

How much longer do you have, Mr. Hamilton?

MR. HAMILTON: About 20 minutes I would think, Your Honor.

JUDGE PAYNE: All right.

NOTE: At this point, the lunch recess is taken.

JUDGE PAYNE: All right. You are under the same oath you've taken previously, sir. Mr. Hamilton.

MR. HAMILTON: Thank you, Your Honor.

BY MR. HAMILTON: (resuming)

- Q Dr. Ansolabehere, you've testified this morning about the functional analysis that's described in the Department of Justice regulations. Is asking incumbent officer-holders what level of black votingage population they think they might need to ensure reelection a [784] functional analysis within the meaning of that regulation in your experience?
 - A Not in my experience, no.
- Q What might the General Assembly have looked at other than a racially polarized voting analysis which we know they didn't?
- A They could look at registration statistics, turnout statistics, election returns along the lines of the first analysis I described earlier. There are a variety of other statistical factors they could look at.
- Q How about just black voting-age population statistics in, say, for example, the companion Senate plan, would that be something to look at?
- A They could look at the black voting-age population statistics, yes.
- Q How about black voting-age population statistics in the enacted benchmark plan at the time it was adopted; would that be something to look at?

- A Yes.
- Q Or the Congressional map that was adopted by the legislature?
- A Yes, to the extent that was informative about voting behavior in different areas of the state.
- Q How about black voting-age population and political performance in other jurisdictions; would that sometimes [785] be relevant?
 - A It can be, yes.
- Q Or other offices in the same area, like mayor or city council? Is that data that the General Assembly might have looked at?
 - A Yes.
- Q Okay. Let me turn your attention to Dr. Katz's, what I've referred to as distance critique and specifically Plaintiff's Exhibit 50 and table 11 which appears on page 82 of your report.
- Dr. Katz criticized your analysis in this table on the grounds that it failed to take into account the interdependency as it relates to proximity of these VTDs in different districts. I'm sure – that's a summary. Do you recall that topic of conversation?
 - A Yes.
- Q Did you fail to consider interdependency and proximity, Doctor?
 - A No.
 - Q Can you explain that.
- A So table 11 is a plan-wide analysis done to sort of set up table 12 which is looking at specific areas within the state. So that would take care of proximity

and distance and which districts are on the margins of each of the districts.

[786] In addition, the earlier tables that come before this that are part of the same series of analyses analyzing whether race or party is a more predominate factor all look at the neighboring VTDs around the districts, which VTDs are moved in and out. Those are tables six, seven, eight, nine, and ten.

- Q How did Dr. Katz approach this question of proximity?
- A Dr. Katz measured proximity by finding the geographic center of the district and then measuring distance of VTDs from that center.
 - Q Is that appropriate?
- A No, because these districts are highly non-compact in some areas, as I noted in my reply report, so a simple distance measure is not going to capture the way the districts are nested. Also, that analysis, the analysis he is doing, is a plan-wide analysis, so every VTD in the entire state is included in his analysis. Table 12, I think, is the more appropriate analysis because that's nested in each of the local areas.
- Q So let's take a look at table 12, if we might. This is the same exhibit, for the record, Plaintiff's

Exhibit 50, table 12, page 83. Can you walk us through what this table is telling us?

A This table examines inside each of the regions whether the racial composition, the black voting-age population of [787] each VTD or the partisan performance in each VTD is a stronger predictor of which VTDs are included in a district or not included in a district.

- Q So can you pick an example? We won't go through all five of the different areas, but give us one example and walk us through the numerical the numbers on this table.
- A So in the last column, for example, the Hampton area, this means that a one-percent increase or area that's one percent more has higher BVAP is one percent more likely to be included. That number is about .09 is about one, so nine-tenths of a percentage point more likely to be included given the partisanship of that district.

The second number in that column, negative .275, means that given the race of that district – of that voting tabulation district, a one percent higher democratic vote share means it's a little less likely to be included in the district in question, 95 or 92 in this case. But that's not a statistically significant coefficient.

So race is a significant factor in the first – the first number in that column is a significant factor. Party is not a significant factor and even has the wrong sign in that case.

- Q And does the same hold true for each of the five areas [788] that you studied?
- A Yes. In each of the five areas, I found that race was statistically significant given the partisanship of the VTD in predicting whether that VTD was included in one of the challenged districts in that area, and that party was not a statistically significant factor given the race of that VTD.
- Q And how does this respond to Dr. Katz's critique of your analysis?

- A Well, this is looking within the specific area. So this is considering the local area, the proximity of the VTDs to that, to each of those districts.
- Q So let's look at table 6A of your report. You mentioned that a moment ago. Can you explain what this table is telling us.
- A Table 6A is an analysis of VTDs that were in the benchmark map or not in the benchmark map and were in the HB 5005 or not in HB 5005, and in particular, the off diagonals look at are the set of all VTDs that were in a district under one version of the map and not in that district under another version of the map, and the first cell is all the VTDs that were in under both versions of the map.

So it consists of all – those three cells consist of all the VTDs that were in the districts, so they'd have to [789] be proximate.

- Q Okay. So I get that that I take it that addresses the proximity critique raised by Dr. Katz?
- A Yes. In fact, these are all those three cells consist of all the VTDs that were proximate in the sense they were in or out in one version of the map or not. So they were connected in one way or another to this district, to benchmark or HB 5005.
 - Q What conclusion can we draw from that table?
- A Again, there's a large difference between the likelihood that a VTD is moved into a district in terms of its BVAP and likelihood it was moved out of a district in terms of its BVAP. Those districts with higher BVAP were moved disproportionately higher BVAP were moved in compared to those that were moved out.

- Q What about politics, political performance of those VTDs?
- A Table 6B looks at the political performance of those VTDs, and the partisan differences were much smaller, about half as large as the racial differences.
 - Q And so what did you conclude from that?
- A I concluded that race was a predominate factor compared to party.
- Q So in any of these two tables, table 6A, table 6B, did Dr. Katz, his critique, even purport to challenge your [790] analysis in either of these two tables?
 - A No, he offered no analysis.
- Q Is there a proximity challenge when you're looking just at the border of VTDs that were moved either in or out? Is that a fair critique of your analysis in these two tables?
 - A No, it's not.
- Q How about table seven, same exhibit, can you explain what this is?
- A Table seven summarizes the VTDs that were kept in the same district from one version of the map to another, from the benchmark to HB 5005. One might think of that as the core. VTDs were moved between African-American districts, between the challenged districts, so perhaps from 70 to 71 or 69 to 70. VTDs were moved into one of the challenged districts from non-challenged districts. VTDs were moved out of the challenged districts from out of a challenged district into a non-challenged district, and then all the VTDs that were not in either, under either map in a challenged district.

- Q So looking just at the black voting-age population, what are the differences between those that were moved in and those that were moved out?
 - A About a 12 percentage point difference.
 - Q Is that statistically significant? [791] A Yes.
 - Q How about partisan performance?
 - A About a six percentage point difference.
- Q So the difference is it's twice as large a difference. Is that is that meaningful from a statistical perspective?
- A Yes. I did a statistical test, and it was a statistically significant difference.
- Q Did you hear Dr. Katz raise any proximity or any other kind of objection to table seven in the analysis presented there?
 - A No.
- Q Let's look at table eight. Can you explain what this table is?
- A Table eight does a similar analysis to tables 6A and 6B looking at each of the districts individually.
- Q What's the difference between seven between table eight and the tables that preceded it that we've just been looking at?
- A This is just a more detailed analysis, going district by district.
- Q Okay. District by district, and, again, you are looking at the precincts that were moved in versus moved out?
 - A Correct.

[792] Q Is there any legitimate critique of this one on the basis that you failed to account for contiguity or proximity?

A No.

Q And, again, that's just because you're looking at the margins of these districts?

A Correct.

Q What did you conclude about – as a result of your analysis that's reflected in table eight?

A That race was a predominate factor in the movement of VTDs in and out in most of the districts, and it was a larger factor than partisanship.

Q It was larger. Was it statistically significant, the difference between race as an explanatory factor and partisanship?

A On the whole. There were some districts where both were small, but where we saw racial differences, they were significant.

Q And for the record, just so we can be clear, can you identify which districts where they were significant and where they were both small?

A 63 was an example where both were – I observed significant differences on both scores. 75, race was predominant. 69, partisanship had a larger effect. 70, they were about the same. 71, race was very large and [793] predominate effect. 74, they were about the same and both significant. 77, both were large, but race was slightly larger. 80, they tended to be smaller.

Q All right. How about table ten, same report, Exhibit 50? What is this table?

- A These are the simple correlations and partial correlations between each of these factors and the likelihood of inclusion of a VTD in a district.
- Q Is there did you fail to consider proximity here?
- A No, because we're looking at whether they're included in the areas.
- Q All right. And what did you conclude as a result of this analysis?
- A That race was a predominate factor, had stronger correlation than party in both cases, and in the second case, the partial correlations race, party was not a significant factor.
- Q Did Dr. Katz criticize this table on proximity grounds or any other grounds?
 - A No, not in his report.
- Q So the only table that Dr. Katz leveled a criticism about was your table 11, the analysis in your table 11?
 - A That's correct.
- Q Now, Dr. Katz also faulted your analysis for failing to consider incumbency; do you recall that testimony?

[794] A Correct.

- Q How did Dr. Katz or did Dr. Katz explain how he would have considered incumbency?
 - A I didn't hear a specific analysis suggested.
 - Q Was it in his report?
 - A No.

- Q Well, would considering incumbency be consistent with the African-American delegates and what they said in the videos that we were watching last week?
- A The African American delegates, from what I heard, indicated that they wanted districts that would perform even when there was no incumbent running. So they wanted districts that would perform quite apart from incumbency.
- Q Is incumbency relevant to the opportunity-toelect question that's before the Court?
 - A Not in my analysis, no.
 - Q Why not?
- A The question at hand is whether the minority voters have the ability to elect their preferred candidates quite apart from whether that person is an incumbent. It's not about the election of specific candidates.
- Q Just a couple more areas before we finish here. Dr. Hofeller testified this morning about core retention. Do you recall seeing core retention in the House criteria for drawing these redistricting lines?

[795] A I don't recall that.

- Q What is the black voting-age population in the core if we describe the core as what was kept in the enacted map from what was in the benchmark map?
- A The black voting-age population in the core of these districts was always was on average about 61, 62 percent, and always disproportionately higher BVAP than the other areas.
 - Q So what does retaining that core tell us?

- A One interpretation of that is that you can choose any part of the district to maintain or retain which VTDs to swap out and suggest that BVAP was also an important consideration in how the core was defined.
- Q All right. I want to switch to Delegate Jones's testimony here for just a moment. We heard some testimony about the way that the districts were drawn in the Hampton area; do you recall hearing that?
 - A Yes.
- Q Delegate Jones said he drew it, in part, to avoid pairing –

JUDGE PAYNE: Mr. Hamilton, please don't summarize the testimony of other witnesses. Just ask the question you want to ask. We'll pick it up. You can make whatever arguments you want to make about it, but it just doubles the amount of time that questions take.

[796] MR. HAMILTON: Thank you, Your Honor.

- Q You testified a moment ago that you studied the movement of precincts in and out of the districts in the Hampton area; is that right?
 - A Yes.
 - Q Did the enacted plan pair incumbents in HD 94?
- A My understanding from testimony and the maps shown was, yes, it paired two incumbents.
 - Q Which two?
 - A Abbott and Oder, I think.
 - Q Can you spell that for the record?
- A O-d-e-r, And I think Abbott is with two Bs and two Ts.

THE COURT REPORTER: Thank you.

- Q When you looked at the movement of VTDs in and out, was race or politics a better explanatory factor in that area?
 - A Race was a stronger factor.
- Q And did that include the specific line in House District 94 involving the pairing of these two incumbents?
 - A I'm not sure what the question is.
- Q The question is, you testified a moment ago that the movement of VTDs, that race was a better the more powerful explanation than politics in explaining the movement of these VTDs in and out, and I'm asking, in this specific area of HD 94, is that true?
- [797] A HD 94 is neighboring HD 95, so the analysis concerning the border of HD 95 and the Hampton area generally suggests that race was a predominate factor in the drawing of the districts in that area.
- Q All right. Let's turn to HD 75, Delegate Tyler's district. Do you know there was a concern raised about prisoners in her district. Even accounting for those prisoners, did HD 75 retain the opportunity to elect?
 - A Yes.
- Q Is the presence of prisoners in the district relevant?
- A The analysis of past voting in other elections and in House of Delegates elections already incorporates the turnout level, and those prisoners can't vote to begin with, so it's already factored in.

- Q In other words, the prison was there in the benchmark and all the way through all the elections in between then and the enacted map; is that what you're saying?
 - A That's correct. Those prisons are under –
 - Q How about the -

THE COURT REPORTER: I didn't understand that.

JUDGE LEE: I didn't either. Go back to what you said about the prisons –

THE WITNESS: The prisons were under both versions of the map. So if it was a performing district before with those prisons, it was a performing district [798] after.

Q In other words, the prisons weren't newly built in the district.

A Correct.

JUDGE LEE: What did you say about turnout, though?

THE COURT: The turnout is already factored into the election statistics study, the percent vote projected to have been won under the benchmark map and under HB 5005.

- Q How many prisons are in HD 75?
- A Prisons and work houses, I think there are eight.
 - Q And what's the total prison population?
 - A About 7,000.
 - Q How many are African American?
 - A About 4,800.

- Q So if we factor that in and we drop the black voting-age population to 50 percent, would Delegate Tyler's district have retained the ability to elect?
 - A My analysis is that it would.
 - Q By what percentage of the vote?
- A I think hers was around 60 percent, 59.-something.
- Q Do the results differ if we use ecological regression versus ecological inference in conducting that kind of an analysis?
 - [799] A No, I reach the same conclusion either way.
- Q So does the presence of the prison population have any material effect on the ability to elect in HD 75?
 - A Not in my assessment, no.
- Q You've studied Dr. Katz, Hood, and Hofeller's report and critiques of your work. Did you use standard methodology and statistical tools in conducting your analysis in this case?
 - A I did.
- Q Did you have access to all the data necessary to formulate your opinions?
 - A I did.
- Q And in your professional opinion after conducting the study, did race or politics predominate in the drawing of these 12 House districts?
- A My analysis and my conclusion is that race predominated.
 - MR. HAMILTON: Thank you. No further questions.
 - MR. BRADEN: Your Honors, I'll be mercifully short.

CROSS-EXAMINATION

BY MR. BRADEN:

- Q Were you present when the floor speech of Representative Tyler was played?
- [800] A I don't remember. Which one was that? I was present I'm almost sure I was present for that. That was about HD 75?
- Q Yeah. That was the discussion where she discussed the prisoners in her district.
 - A Yes.
- Q And do you know that she voted against the plan?
 - A That's what I've heard in this courtroom, yes.
- Q Do you know why she voted against the plan? I think she expressed concern regarding it not having a large enough black voting-age population?
- A That's what I heard testimony that's what I heard.
- Q So are you saying she was mistaken about what she needed in that district for her to be reelected?
 - A My analysis indicates that's true.
- Q So you are representing to the Court you have a better understanding of electional politics in that district than Representative Tyler does?
- A I don't know Representative Tyler's understanding of elections in her district, and I don't know what the basis for her judgment is about which areas she wanted in or out, but my analysis indicates that this is a district that would perform for an African-American candidate.

Q Do you know whether she replaced an African-American member in that district or a white member?

[801] A I don't recall.

Q If we could bring up HD – our favorite exhibit here, the map of HD 71.

JUDGE PAYNE: Is that Exhibit 94, Intervenors'?

MR. BRADEN: Yeah, 94, page four.

- Q And if you could take a look at that map, have you seen that before?
 - A I have.
- Q And it's, you said I didn't hear what you said. I'm sorry?
 - A I have.
- Q So you understand the graphic and the legend for that map?
 - A Yes.
- Q Okay. Were you present when Delegate Jones testified?
 - A I was.
- Q And were you present when Delegate McClellan testified?
 - A I was.
- Q If I could go let's leave this up, and I just want to ask you a question regarding table eight which you just testified to from your report. It's page nine of your report. It's Plaintiff's Exhibit 50, and I think there was a discussion of the Richmond area.
 - A Yes.

[802] Q And you pointed out in particular HD 17?

- A Correct.
- Q And did I hear correctly that your analysis showed that this one had an especially strong showing of race predominating over politics in the drawing of the district?
 - A Correct.
- Q Okay. So let's look at the district for just a second here. Precinct 207, do you see that on the map?
 - A Yes.
- Q Were you present for the testimony of Delegate Jones that this particular precinct was moved out at the specific request of an incumbent member who represented that in city council or was city counsel president?
 - A Yes.
- Q But your analysis doesn't examine that type of politics? You're only talking about electoral politics?
- A I'm talking about the racial composition of the district and the voting patterns and strength in that district, not about how an incumbent
 - Q You had -

JUDGE PAYNE: Wait a minute. He was answering the question. Not about what?

THE WITNESS: Not about how the incumbent ran in a city council election in the past or how they performed [803] in the past.

Q So if Delegate Jones were to say that the principal reason why this particular precinct was moved out of the district was based upon a request of an incumbent member, would you have any information to counter that?

- A No.
- Q So wouldn't you think that request was the predominate factor in moving that district out that particular precinct out?
- A But I don't know the basis of the request. It could have been race, it could have been party. My analysis indicates the movement of all these precincts in this area is more strongly related to race than politics.
- Q I'm sorry, you answered a question I didn't ask. I was asking about this specifically. You did not hear Delegate Jones say he was asked by an individual who said he wanted it because he had represented it as a city council president; you didn't hear that testimony?
 - A I heard that.
- Q Do you have any reason to doubt that testimony?
 - A No.
- Q There are three precincts in the northern part of this district. They are Summit Court, Hilliard, and Stratford Hall. Do you see those?
 - A I do.

[804] Q What county are they?

- A Henrico, I think.
- Q They are not part of Richmond, are they?
- A They're not in the Richmond city of Richmond, no.
- Q So those three districts were precincts were moved out, and that made Henrico County whole.

Wouldn't that comply with one of the criteria adopted by the state?

- A Potentially, yeah.
- Q Does this analysis tell us anything comparing race to incumbency considerations?
 - A I did not examine incumbency considerations.

JUDGE PAYNE: So I guess the answer is no.

THE WITNESS: No.

JUDGE PAYNE: Is that right?

THE WITNESS: No, just race.

- Q You didn't consider service areas?
- A No.
- Q You didn't consider communities of interest?
- A To the extent that I examined race, which is sometimes identified as a community of interest, geography, such as which counties these districts are nested in or local areas, county line crossings, city crossings, I did consider in that regard communities, but not beyond that.
- Q So not to beat a dead horse, or dead statistical analysis, sorry, your VTD analysis is only comparing the [805] variable of race to election results; correct?
 - A Correct.
- Q And you make no comparison to any other of the criteria in this analysis other than those two; that's it?
- A Well, there is an analysis of split county lines, whether the inclusion of a VTD split a county line, but beyond that, nothing else.

- Q I have quickly, and it will be quick I'm trying to at the beginning of your redirect testimony, you had table two. I believe that's on page 12 of your rebuttal report. Am I correct is this the statistical analysis that you said that you did on compactness?
- A Below is a statistical analysis, and I think it's table two if you would page down in the report.
 - Q Where would be the statistical analysis?
- A Where I compare the rank of the compactness scores, the point was made by one of the experts, I think Dr. Hofeller, that the distribution of compactness scores was not different for the challenged districts and the non-challenged districts, but in my reply report, I had conducted an analysis below this, below paragraph 37, of the rank of the scores and found a statistically significant difference on all the scores.
 - Q What variables did you use?
- A I used the Reock score, the Polsby-Popper score, and [806] the Schwartzberg score for all of the districts in the state and for the 12 challenged districts.
- Q So I understand, because it's a long time since I've had statistics, you looked at those scores, simply comparing those scores and districts basically, just a ranking effectively; am I correct?
- A You have two distributions. You have the set of Reock, Polsby-Popper, Schwartzberg scores for the challenged districts, and then you have the set of compactness scores for the non-challenged districts, and you can do a statistical test between the averages or between the full set of ranks, and I did a rank order test.

- Q And would compactness of districts be impacted upon where they are geographically in the state?
 - A Potentially.
- Q So if you are on the peninsula or in Tidewater, you've heard some testimony, do you disagree that compactness scores there are likely to be more difficult to achieve lower compactness scores?
 - A Possibly.
 - Q So-

JUDGE PAYNE: Possibly it could happen –

THE WITNESS: They could be –

JUDGE PAYNE: Possibly it could happen or [807] possibly you disagree with it? He asked if you disagreed.

THE WITNESS: I agree that it's possible.

- Q So how did you control for the fact that half of the challenged districts are on the peninsula or in Tidewater?
 - A There's no control for that.

MR. BRADEN: No further questions.

THE COURT: Any redirect?

MR. HAMILTON: Yes, Your Honor, but only briefly.

REDIRECT EXAMINATION

BY MR. HAMILTON:

Q Only because it wasn't shown to the Court, the average rank analysis, that is table three in your rebuttal report, which is Plaintiff's Exhibit 51; is that right?

A Correct.

- Q And that's what we're looking at here?
- A Yes.
- Q Can you walk us through what this shows us?
- A So I took the Reock score of every district in the plan, just looking at the first column, took the Reock score of every district in the plan and ranked to order those districts from the most compact to the least compact in the plan, and then I computed the average of those ranks for the 12 challenged districts and the average of those ranks for the non the 88 non-challenged [808] districts, and then I did a statistical test for the difference between those ranks.
 - Q And what was your conclusion?
- A For every one of the scores, there was a substantial difference in the rank of which are more likely to be on the think about it as which districts are more likely to be on the less compact end of the spectrum or the more compact end of the spectrum, and there's a statistically significant difference regardless of which of the three criteria are used, and it's highly significant.
- Q Result is the same regardless of which test we use?
 - A The conclusion is the same, yes.
- Q If we're looking at compactness, as Dr. Hofeller said, as a flag, which of these two groups is flagged; the 12 challenged districts or the rest of the state?
- A If it's a flag, I would suggest the 12 challenged districts because there's more scrutiny, why are they more on that end of the spectrum of less compactness.
- MR. HAMILTON: Thank you. No further questions, Your Honor.

JUDGE PAYNE: All right, any other rebuttal witnesses? You may step down, sir. Thank you for being with us and giving us your testimony.

MR. HAMILTON: No, Your Honor.

JUDGE PAYNE: All right.

[809] MR. HAMILTON: Your Honor, two house-keeping matters, and I don't know if you'd like to take them up before closing or after.

JUDGE PAYNE: Go right ahead.

MR. HAMILTON: The first one is just clarifying for the record what exhibits have been admitted and which have not, and I'm happy to discuss it with the clerk when we end just to make sure. I just think it would be helpful for all parties to have a clear understanding of what exhibits have been admitted and what have not.

JUDGE PAYNE: Well, the standard way of doing it is to have the lawyers recite – sit down and agree what has been admitted and what hasn't with the clerk, and then recite it into the record. It's called the Lentz approach.

MR. HAMILTON: Would you like us to do that after closing, Your Honor?

JUDGE PAYNE: Yes.

MR. HAMILTON: The second request is that because we've – the trial has continued on to this Monday, that we slightly adjust the post-trial briefing schedule. Currently, the opening briefs are due on July 20th with replies due on the 27th, and I understand defendants have no objection. Intervenors, I don't think they object, but we would like to move it back four days to the 24th and to [810] the 31st.

THE COURT: I think we are in agreement here to just leave the schedule like it is, please.

MR. HAMILTON: Thank you.

JUDGE PAYNE: Go ahead and argue your points now. Remember each side has 30 minutes, and that includes the questions you're going to get, too.

(Judges confer among themselves.)

JUDGE PAYNE: 15 minutes to make argument, and then we'll have questions.

MR. HAMILTON: All right.

THE COURT: Remember, we've all read everything that you all have submitted, and in the final analysis, notwithstanding the statistical evidence which you all have offered, it really isn't a particularly complex thing. So let's hear what you all have to say about it. Maybe you do think it's complex.

JUDGE LEE: The clerk is going to let us know when you have five minutes left as well.

MR. HAMILTON: Thank you, Your Honor. There's a lot to cover, and I want to start by thanking the Court for the courtesy and patience over the course of the last week. It's been an honor to appear before you.

[811] This case boils down to a very simple proposition: May Virginia's General Assembly utilize a fixed numerical racial threshold in establishing district lines across 12 House districts with significantly different political and demographic properties. The answer to this question has been addressed and definitively settled by the United States Supreme Court in it's recent *Alabama* decision which unambiguously condemned the use of racial

thresholds in redistricting whether hard and fast or merely rough targets.

This Court, too, addressed and resolved this very issue in the *Page* decision rejecting a 55 percent threshold on very similar facts in the Congressional map. Neither decision was unusual. Both follow along the line of 14th Amendment cases.

The first question before the Court is whether race predominated. The key inquiry is what the legislature intended, and here, that's easy because they told us. This is a direct evidence case. This isn't a case where you need to worry district lines or Reock scores or locality splits or the other kind of circumstantial evidence that is sometimes required to decipher what the General Assembly was up to. It told us what it was doing and why when it drew these 12 challenged districts, just like in Alabama, just like in *Page*.

[812] Now, there's plenty of circumstantial evidence as well, and it all confirms what the direct evidence so plainly tells us. So let's start with the direct evidence that race predominated.

First, it's clear that other than population equality, which the Court said in *Alabama* is a background principle, the first and most important criteria was compliance with the Voting Rights Act, and the means the General Assembly used to that end was the explicit use of the 55 percent racial BVAP threshold or target.

That's what all the evidence shows, all the emails, the floor testimony, the testimony here in this Court. The redistricting, the General Assembly's redistricting criteria places that number one, and it prevailed over everything.

It's worth comparing the criteria adopted here by this General Assembly to the criteria adopted in *Page*, almost identical, and the criteria adopted in *Alabama*, almost identical.

In *Alabama*, the legislature thought it needed to maintain existing black voting-age populations and could not drop below that. Court said no. In *Page*, the General Assembly thought it needed to maintain at least 55 percent black voting-age population in order to avoid retrogression, and the Court said no.

[813] Here, exactly as in *Page*, the General Assembly thought it needed to maintain a floor of 55 percent BVAP in order to avoid a retrogression, and the evidence showed that not only did the General Assembly prioritize it over all other factors, just like in *Alabama* and *Page*, the way they chose to implement it was to have the overriding criteria of the Voting Rights Act prevail over all others.

Now, we've heard a lot of evidence in this case about the number 55 percent and what it meant. On the first day of trial, intervenors stipulated that the General Assembly had, quote, an aspiration or target of 55 percent. Delegate Jones called it a threshold and testified it was a rule of thumb or aspiration. Delegate McClellan called it a target criteria and testified that Delegate Jones told her that each of the majority-minority districts would have to have at least 55 percent BVAP.

John Morgan, the consultant, called it a floor in his expert report which is both here and cited in the *Page* case. Delegate Dance called it a rule of thumb, and, of course, Delegate Armstrong called it a bright-line rule.

It's all interesting nomenclature, but the question is not how do we call what they did, what's the words

that we use to describe. We can call it a target as Mr. Braden stipulated, or a threshold as Mr. Jones wrote in his email and as found by the Court in *Page*. We can [814] call it a floor. We can call it an aspiration, a goal, an objective, an ambition, a plan, anything else, but it doesn't matter what we call it.

The point is, there is an acknowledged and admitted use of race as a predominate factor in drawing these districts through the use of that threshold, and the issue is not whether it was a hard and fast rule. The intervenors seem to be under the impression that as long as they permitted minor deviation from a fixed threshold as measured by a secret and undisclosed DOJ black measuring stick, then this was permissible, but with all due respect, that's just not the law.

The use of racial targets without adequate justification is equally forbidden, whether roughly applied, like in *Alabama*, or fixed as a hard and fast rule like in *Page*. Justice Breyer, writing for the Court, emphatically rejected that kind of an approach calling it asking the wrong question.

Whatever else we might debate about in this record before this Court, it's clear that the General Assembly heavily relied upon a rough mechanically numerical view just like as was rejected in *Alabama* and *Page*. Of course, it was uniformly applied, as Delegate Jones wrote in his email, to every single solitary district.

[815] I won't read you the quotes from the cases, but, of course, we can see the actual conflict between this racial target and the other criteria in the change requested by the Richmond registrar, Ms. Showalter. She asked for a slight change to avoid splitting a VTD, and you recall Delegate Jones testified – this was the measly 0.2 percent change.

Delegate Jones testified that he fixed this in the last-minute amendment just before passage. That conflicts with what Delegate McClellan says, but it doesn't matter. Let's take what Delegate Jones said as true. It demonstrates the point. We are looking at House District 71. When the request was made, please don't split this VTD, it was rejected because it would go below – would drop the BVAP below 55 percent, so it couldn't be done. But then, when a way was found to unsplit that VTD and keep the BVAP above 55 percent, it was allowed in final passage. That demonstrates the point.

And it also serves as an eloquent rebuttal of something else we heard at trial, that Delegate Jones' testimony about this DOJ black district, not once during any of the legislative debates or hearings did he make such a distinction or tell the other delegates that there was this other measuring stick that he was using.

Delegate Jones also apparently didn't tell John [816] Morgan, the consultant, who discussed 55 percent. Nor did he tell DLS when they prepared that table we just looked at this morning that reported all of the districts at 55 percent or higher. But it doesn't really matter.

The distinction between how DLS or DOJ calculates this is simply irrelevant, and it doesn't matter what we call it. They used a racial target, and whether that was 53 or 54 or 55 or 56, whether you measure it this way or that way, it just doesn't matter.

Now, there's a bunch of circumstantial evidence, and in the interest of time, I'm going to skip through it. It's all contained in Dr. Ansolabehere's reports and

testimony which I know the Court was paying attention to.

So it brings us to the intervenors' claim that it was politics, not race, that predominated, and there's a lot of things I could say about that. First, it's a post hoc argument. The criteria that the General Assembly adopted couldn't be clearer. All considerations are subordinated to compliance with what was the Voting Rights Act, one person one vote.

Indeed, political advantage appears nowhere in the published criteria, and although Delegate Jones spent a lot of time talking about all the many local factors he considered, he said precious little about political factors, and, indeed, admitted that unseating democrats [817] was, quote, not the goal, close quote.

To the extent that there's any evidence that politics played a role, that does not show that these factors predominated over race. Delegate Jones made those changes and weighed the political factors only subject to the 55 percent threshold. In other words, he wouldn't make any change that he testified at trial if it had caused the BVAP in the challenged districts to fall below 55 percent. That was the one thing was not negotiable.

Because race was a predominate factor in drawing these districts, intervenors have the burden of identifying the compelling state interest to justify the use of race and show that their use of race was narrowly tailored to advance that compelling state interest, but that's something they just can't do because these districts differ significantly, and a one-size-fits-all racial rule cannot be used to create these kinds of a district.

They've identified two defenses, Section 2 and Section 5 of the Voting Rights Act. Mr. Braden took me to task for failing to mention Section 2. For starters, there's not a floor – not a mention in any of the floor debates about any concern about a Section 2 claim. It's utterly silent. When the Court asked Delegate Jones, where did this 55 percent number come from, he answered [818] with a vague comment that the community felt that that was what they needed to ensure their reelection and the election of those that followed. Not a word about Section 2, nothing about it.

In any event, it would be impossible to present a Section 2 claim or a concern about a Section 2 claim without going through the *Gingles* analysis which, of course, requires a racially polarized voting study, and we know that wasn't done.

Let's put all that aside and just focus on what the plaintiffs are trying to accomplish here. Let me be as clear as I can be. Plaintiffs are not even remotely suggesting that any of these 12 districts should have had their BVAP lowered below 55 percent. We've never made that claim, we never will make that claim.

It is essential that these all be healthy performing majority-minority districts, just like CD 3 when it is redrawn and just like the Senate majority-minority districts. Determining – maintaining healthy and performing majority-minority districts hardly requires applying a minimum BVAP threshold well above that needed to win a majority of minority voters that would guarantee winning percentages in the 60, 70, and 80 percent total vote.

That's not protecting African-American voters. [819] It's doing precisely the opposite, all under the guise of helping. A district-specific analysis is what's required

under the Voting Rights Act, and that's exactly what, even by intervenor's own expert, shows significant variations between each of these 12 districts and devastatingly undercuts this flat rule applied to all 12 districts.

Section 5 isn't a compelling interest either, because the only way to survive strict scrutiny is to show that Section 5 actually required the use of the same predetermined 55 percent BVAP threshold. Remarkably, no effort was made to determine whether that threshold was actually required to avoid retrogression in the challenged districts.

Delegate Jones didn't do a racially polarized voting analysis. He didn't do a simple statistical analysis. He looked at almost nothing other than to ask the existing incumbents, hey, what do you think, and what number should be included.

That's asking the wrong question under *Alabama*. Justice Breyer, writing for the Court in *Alabama*, said how can we — the legislature had asked, how can we maintain the present minority percentages in majority-minority districts. It should have asked, quote, to what extent must we preserve existing minority percentages in order to maintain the minorities' present ability to elect the [820] candidate of its choice.

See how close these two cases are? Swap out maintain – maintain present minority percentages with maintain black voting-age population at or above 55 percent, and the answer to this case becomes quite clear.

By the way, that's not a recent decision announced or not a new rule invented by Justice Breyer. It's a long line of cases. *Smith v. Beasley* specifically so holds, and we talked about that in our briefing.

Dr. Ansolabehere provided the Court with testimony about the tailoring in these different elections, and Dr. Katz's testimony himself demonstrated the significant variance between this. Now, intervenors claim that the real election is the primary, but even intervenors, two of their experts said there's not enough data there to do an analysis, and I submit to the Court there has to be a way to answer this question. It's not enough to say that there isn't, and Dr. Ansolabehere did that analysis using a different data set that closely correlated with the behavior in a House of Delegates district.

That's the way this analysis is done. It's no answer to say that the incumbents voted for the plan like we saw and their speeches on the videotape. Of course [821] they liked it. What incumbent wouldn't want their winning percentages run up to 70 or 80 percent? But that's not the question. The Voting Rights Act was not passed to protect their interest. The Voting Rights Act was to protect the interest of the voters, not to create overwhelmingly safe districts.

Second, the black voting-age population, we looked several times at tables showing that in some cases they dropped, some cases they went up, and in some cases they held the same from the black – from the benchmark. Again, wrong question. The question isn't how – did it go down, did it go up. The question is what is the percentage of black voting-age population that we need in order to retain the ability to elect.

Sometimes that might mean dropping the BVAP. Sometimes it might mean bringing it up, but the use of an undifferentiated racial floor is inappropriate in all circumstances.

In his opening statement, Mr. Braden complained about our failure to consider history and context, but what we know is that Virginia has changed.

THE CLERK: Time.

MR. HAMILTON: Thank you, Your Honor.

MR. BRADEN: May it please this Court, the threshold issue for this Court is straightforward: Is [822] this plan subject to strict scrutiny. Now, the answer is not found in whether or not the state used race. It did use race. The fact is that race is used in virtually every state, in every municipality in drawing plans. So that's not the test, and the test is not whether or not the state tried to comply with the Voting Rights Act.

One would assume that virtually every state tries to do that, too, so trying to comply with the Voting Rights Act doesn't get you to strict scrutiny. Using race doesn't get you to strict scrutiny. Having a rule of thumb or threshold or a goal, I would suggest to you, clearly doesn't get you to that either. It doesn't get you to strict scrutiny.

The Court Supreme Court, I believe, if it's ever clear in this area, I think it's clear on this issue. The test is whether or not race predominates, requires the subordination of, or departure from, or transgression from the state criteria or state law. That's the test.

How would you draw a plan when you have to consider race without starting out with some goal or threshold notion of what those numbers ought to be?

The plaintiffs have the burden to get to strict scrutiny. The plaintiffs have the burden of proving that the state violated its traditional criteria or state law because of race.

[823] What evidence have they provided to this Court to carry that burden? Three expert witnesses. Let's bring up District 71, our favorite district here. Did Delegate McClellan provide this Court with any evidence? Did she say, well, this part of the district isn't in because of race? Did she talk about any problem in this district related to race? Yes, we had some emails. A bit of a mystery to me what was going on in particular in those emails, but let's be clear about what we do know about those emails, is they relate to HB 5001 which was vetoed by the governor, and 5005, we have uncontroverted testimony in this Court and from the floor of the House that those issues were solved.

McClellan's testimony I suggest the Court look at closely because she was testifying about the inability to solve those problems in the Senate during the amendment process. They were solved in the plan that's before this Court. All those emails are irrelevant as to what's before this Court.

We have one complaint from the delegate. That's the division of the Fan. I can understand that's a neighborhood. We have a Richmond judge here I'm sure familiar with that area. Why was it divided? Not because of race. It was decided – divided because of a particular political decision.

[824] The northern part of the district loses three precincts. Why? To make a county whole. What evidence do we have that this district, any line in this district, the predominate factor is race? What evidence

is before this Court that this district violates any state criteria? I would suggest there is none, none whatsoever.

This district is among the middle in compactness. By the way, the delegate actually voted for the plan. And, by the way, this district is growing more white as every day goes by. Isn't it appropriate for the state to consider that factor in looking forward in drawing districts? Are we drawing the districts just for this election, or are we drawing it looking forward? Even their expert admitted that demographic change is totally appropriate to consider. So we have no evidence here.

There are other witness, Senator Dance, again, we could have called her as a witness. We thought her testimony from the floor, contemporaneous, was sufficient. She came, and did she say there was a rule? No, she didn't say there was a rule. Did she point to part of her district or anybody else's district where the use of race resulted in a violation of any of the state's criteria? I heard no testimony to that effect.

Delegate Armstrong, it's amazing they bring Delegate Armstrong on to testify about drawing this plan [825] because, of course, he knew nothing about it. He was on the losing side, and by his own admission, let's be clear, he was looped out of the process. But what does he say the primary purpose is? You saw his contemporary statement on the floor. This was an incumbent-protection plan. That's the predominate motive of this plan, maintaining the status quo.

So what do we have to prove that part of this plan violates the state's criteria, what evidence? We have their expert. He does a VTD analysis. Let me bring up

Plaintiff's Exhibit 16. You are familiar with this. This is the list of state criteria.

So the plaintiffs' expert doesn't look at any of the factors in Roman numeral V. He purports to tell you that race is predominant over politics. He does not purport to tell you anything else in regards to these criteria. So how can he tell you that race is predominant over all the other traditional redistricting criteria when he didn't look at them?

Now, his racial analysis in the division of the VTDs, can I personally explain to the Court what's wrong with it? The answer to that is no. That's the reason we have a statistics professor from Cal Tech who, I would suggest, not only testifies for us but regularly testifies for Democratic attorneys and Democratic interests in [826] addition to Republican people defending plans, and he told you that – effectively his testimony was that this analysis was worthless. Can I explain that in detail?

No, I can't. I would suggest you simply weigh the credentials and his testimony versus their testimony from their expert.

We don't – we have a discussion of compactness.

I would suggest to the Court that you take a look at this chart. It's fairly simple, and it's using the analysis that the plaintiffs' expert decided to use. So it's the one that's most beneficial to them. Look at the division, and the answer is you don't get much out of this.

We've got three of the ten least compact districts are the challenged districts, and we have seven of the 50 lowest in compactness, and, of course, we have five on the other side. Does that really tell us much? I would suggest it doesn't tell you anything other than the fact

that six of these districts are in Tidewater and on the peninsula. That's the compactness problems here.

This analysis we have, or I did a statistical analysis, well, it's great that you did a statistical analysis, but if you don't use the variable of where the districts are, what do you get out of it? Let's use the least compact district, 95. Defendant Exhibit 92, District 95.

[827] We heard what I think is actually a preposterous notion that somehow that election data and politics wasn't considered except we had a witness talking about this exact map saying he was using something just like this to consider that in the process.

How do you get to the reservoir precinct? That's the last precinct right here. If politics isn't the principal factor, if race was the principal factor, why do we pass by all these areas which have more black voters that go up there? It goes up there for exactly the reason that was testified in this Court. It was a political – complex political reason involving an open seat, getting rid of the ferrymander, and trying to avoid pairing two women members of the legislature.

We don't hear any analysis from the other side on that point. There's no contradictory testimony. What drove the elongation of this district was a lot of factors, but it wasn't principally race or all those black neighborhoods would have been included in the district.

You simply don't get to all the statistical analysis about this magic number. You don't get the strict scrutiny unless you prove we violated the criteria, and they've provided no evidence to that effect. But, I'm conservative, as I said. I've put a belt around my waist, but now let me put the suspenders on.

[828] So if it is subject to strict scrutiny, then the question before the Court is, is there compelling state interest. I would say there's two compelling state interests: Obviously compliance with the Voting Rights Act, Section 2 and Section 5. Section 2, let's be candid. I think this Court is sophisticated enough to understand that if we had drawn District 71 and left it the way it was at 46 percent, we would be in this courtroom today with probably the same lawyers and probably the same experts defending a Section 2 challenge to the plan.

So I don't think this Court can have any doubt that compliance with Section 2 and Section 5, which, again, if you look at the criteria doesn't say retrogression. It says compliance with the Voting Rights Act, both two and five, that's a compelling state interest. That's vital to the state.

What's narrowly tailored? Well, the narrowly tailoring analysis shouldn't be a magic number. It's a question of whether or not the violations of the state's traditional criteria and the state law are the least you need to do to comply with the Voting Rights Act.

It is not a statistical number. It's not a magic number. We don't have to hire a political scientist, and the truth is, if we hired a political scientist, depending on which political scientist you hired, you get a [829] different number. Oh, and by the way, you'd get a different number between which races you use.

So I would suggest to this Court we have nonsense when we try to get this number of what's the magic number to elect if we're only looking at general elections. I'll finish with the suggestion to this Court to go outside, walk around Alexandria and realize this

particular city hasn't elected a Republican mayor since before I was born, before I was born.

So trying to figure out the votes of the black community versus the white community in this area by looking at general election results is a joke. It is a joke. You need to look at primary results. Simply saying, well, since we don't have a primary, we'll look at these other data, you know, it's 101 statistics, 101 science, bad data, bad results.

The fact that you don't have the right data to make the analysis doesn't mean that you should make the analysis. Don't accept this invitation into the political thicket. If you use their analysis, if you accept their analysis, then if we're going to subject all the plans that use race to strict scrutiny, you're going to have to have a big agenda for you redrawing plans across the nation. Thank you.

JUDGE PAYNE: I think at this juncture, we will [830] switch court reporters.

MR. TROY: For the record, the defendants would join the defendant intervenors' argument.

(Brief pause in proceedings.)

JUDGE PAYNE: All right. Members of the Court have some questions, and Judge Keenan will start. When you respond, please go to the lectern so that your answer can be heard.

JUDGE KEENAN: Thank you, Judge Payne.

Mr. Hamilton, would you please approach the podium.

MR. HAMILTON: Yes, Your Honor.

JUDGE KEENAN: Mr. Hamilton, you just said that there really isn't a difference in terms of evaluating

the evidence as to whether it's a rule, the 55 percent number, or whether it's a rough target or a threshold.

Are you saying that there is no effect on our predominance analysis in making that determination?

MR. HAMILTON: There is no effect, Your Honor.

The Court in *Alabama* is quite clear that it was evaluating a rough guideline. And the question in *Alabama* was, do we – how can we keep the black voting-age population at or above its existing number because they believed –

[831] JUDGE KEENAN: Right, I understand that. But isn't it a fact though that if you have – isn't the direct evidence stronger if you have a rule than if you have a rough target?

MR. HAMILTON: Oh, sure. I take your point -

JUDGE KEENAN: So that does affect our predominance analysis then as to the weight of the evidence in the case, would it not?

MR. HAMILTON: I suppose, I suppose that's true. Here, of course, we have – and I will stop from using the word "rule, target, threshold," whatever we want to call it. We have a device that was set at 55 percent and applied in such a way that the end of the sausagemaking process it spit out 12 districts at 55 percent or higher.

And it doesn't matter which way we calculate this, whether we use – you know, we've got all this kind of confusing stuff about the way you calculate black voting-age population. All you need to look at is that exhibit we were looking at this morning, I think it was Exhibit 47, which is the black voting-age population data presented by DLS, however they do it, to the Department of Justice.

What do those numbers show? Every single case, 55 percent or higher.

And Dr. Ansolabehere talked about the census [832] numbers. What does that data show? Every single one –

JUDGE KEENAN: Okay, thank you. Now, we've heard a lot of evidence in the case, primarily from the defendant-intervenors, that there were a lot of other considerations going on here, not pairing incumbents, putting additional population around the residences of incumbents, putting additional businesses like into Delegate Howell's neighborhood. The ripple effect in moving populations among districts.

Is this a binary consideration for the Court? In other words, is it simply traditional districting principles versus race? Or is there something else that we need to consider regarding the use of race?

MR. HAMILTON: Race was the overarching nonnegotiable factor here. You know, of course there were all sorts of local considerations going into drawing these districts, but none of them were done if they would drop the BVAP below 55 percent.

That's going to be true in *Alabama*. That was certainly true in *Page*. That is true every time a legislature does a district, it's gong to look at the sort of considerations that Your Honor just mentioned. And so, of course they were considered, and I don't dispute that.

But they were considered only if they complied with the 55 percent rule. And if they didn't, then that [833] was forbidden, and we saw that.

JUDGE KEENAN: Were those considerations race neutral in this case?

MR. HAMILTON: Well, we don't have a lot of evidence on that. In some cases I suspect not. In other cases they may have been race neutral.

But we know that from Dr. Ansolabehere – just backing up, like let's look at the universe of changes that were made and what effect did they have. So, yes, maybe somebody asked a favor for this one precinct line.

Of course, we know from Delegate Jones' testimony, that was one of dozens and dozens of requests that he got.

Now, why did he choose that one? And can we back up and look at a pattern from the whole Commonwealth? And we can, and we know what that pattern shows. And that is that race was correlated with the movement of these VTDs in and out. That's Dr. Ansolabehere, all those tables we just went through this morning, statistically significant, and they all point in the same direction.

JUDGE KEENAN: Let me ask you the last question. And that's the absence of an alternative plan in terms of your case. You didn't present an alternative plan.

Are you required to prove as part of your case that the use of the 55 percent rough target affected how [834] the districts were drawn? Or nearly you could show that with an alternative plan, could you not?

MR. HAMILTON: Well, you could. The alternative plan –

JUDGE KEENAN: Now, in the absence of an alternative plan, how do we grapple with that consideration?

MR. HAMILTON: The alternative plan requirement is from *Cromartie*. And this is not a *Cromartie* case.

Cromartie is where race closely correlates with politics and there is no direct evidence. Cromartie wasn't a direct evidence.

Here, where you've got a flat rule, that's really largely the end of the inquiry. If it's –

JUDGE KEENAN: How do we know it's a rule other than the fact that there is circumstantial evidence? We know what Delegate Jones thought. You presented about three delegates who said it was a rule, and Jones says it's a target.

MR. HAMILTON: And I may -

JUDGE KEENAN: And you say that doesn't matter.

MR. HAMILTON: Exactly so, Your Honor. And I misspoke just then. I didn't mean to use the forbidden word. We can call it a target. I am perfectly happy to embrace that and never again use the word "rule" because [835] it doesn't matter. A target, a criteria, a threshold, a goal, they all – they are equally forbidden under the *Alabama* decision and under the *Page* decision in this court.

JUDGE KEENAN: Okay. That's all I have.

MR. HAMILTON: Thank you, Your Honor.

JUDGE PAYNE: Judge Lee.

JUDGE LEE: If you would pull up Plaintiffs' Exhibit 50, page 72, Table 4. I want to you focus in on two things.

First, what evidence do you have that before the bill was introduced, that 55 percent was the rule, as you say?

MR. HAMILTON: I'm sorry, Your Honor, can you read the question –

JUDGE LEE: What evidence do you have that before the plan was introduced, that 55 percent was the rule?

The testimony – the floor debates were after the plan had been prepared. I'm asking, what do you have that preceded the plan's preparation that shows 55 percent?

MR. HAMILTON: Well, the evidence showed – well, first of all, we have the delegates who testified that they were told as they were drawing the plan – McClellan, of course, was on the Privileges and Elections Committee, so she was assisting in preparing the plan. And she [836] testified that Delegate Jones told her that you needed to have the floor being 55 percent or higher or a change wouldn't be adopted.

Delegate Armstrong testified that way. Delegate Dance testified that way. And of course, there is lots of e-mail going back and forth as well during the preparation of this plan about how it was and what changes were going to be adopted and accepted and what were not.

JUDGE LEE: You're referring to the election registrar's e-mail –

MR. HAMILTON: That's one.

JUDGE LEE: – that was written by the staff member for Delegate Jones, correct?

MR. HAMILTON: Correct.

JUDGE LEE: Not Delegate Jones.

MR. HAMILTON: Delegate Jones didn't, that's true.

JUDGE LEE: All right. Now that you have Table 4 up, my first question is whether at the time the

redistricting process began, were nine of the districts above 55 percent BAP?

MR. HAMILTON: I am going to have to look at that.

JUDGE LEE: Yeah, take a look.

MR. HAMILTON: I don't dispute the math if Your [837] Honor has done the –

JUDGE LEE: Dr. Ansolabehere had the math. I want you to do your math using this table.

MR. HAMILTON: I get six where the benchmark in 2010 was over 55 percent.

JUDGE LEE: Six out of 12?

MR. HAMILTON: Right.

JUDGE LEE: Let's do them. 69, is that above 55?

MR. HAMILTON: Well, the first one is 63. But, yes, 69 is, at the benchmark, it was 56.3 percent versus 55.2. So that's one.

JUDGE LEE: Okay. All right. The next one, 69, is, right, above 55?

MR. HAMILTON: Well, I'm -

JUDGE LEE: I'm looking at the benchmark for 69.

MR. HAMILTON: In 69, that's the first one we just covered, right? So that's –

JUDGE LEE: No, 63 is the first one we covered. At the top of this table –

MR. HAMILTON: Okay. 63, the benchmark was 58.1 percent and –

JUDGE LEE: That's above 55.

MR. HAMILTON: Oh, I'm sorry.

JUDGE LEE: Is my math right on that?

MR. HAMILTON: Oh, I am sorry. I'm sorry, I [838] misunderstood the question.

JUDGE LEE: Is my math correct?

MR. HAMILTON: I thought you meant the relative movement –

JUDGE LEE: I'm asking you, was 63 over 55 percent?

MR. HAMILTON: Yes.

JUDGE LEE: And so is 69?

MR. HAMILTON: Yes.

JUDGE LEE: 70?

MR. HAMILTON: Yes.

JUDGE LEE: 74?

MR. HAMILTON: Yes.

JUDGE LEE: 77?

MR. HAMILTON: Yes.

JUDGE LEE: 90?

MR. HAMILTON: Yes.

JUDGE LEE: 92?

MR. HAMILTON: Yes.

JUDGE LEE: And 95?

MR. HAMILTON: Yes.

JUDGE LEE: So nine of the districts were above 55 percent –

MR. HAMILTON: That's correct.

JUDGE LEE: – when they started, is that right?

[839] MR. HAMILTON: That's right.

JUDGE LEE: So then 55, when you look at the next column HB 5005, we did this before –

MR. HAMILTON: Right.

JUDGE LEE: They're not all exactly 55. And in some of them he went down – the numbers went down, is that right?

MR. HAMILTON: That's right.

JUDGE LEE: How does that show that there is a rule?

MR. HAMILTON: Because they're all -

JUDGE LEE: How does that math show that there is a rule?

MR. HAMILTON: Well, I don't know that the – well, the specific answer to your question is, they are all converging on 55. The ones that are below are coming up over 55. And the ones that are above are coming down to 55.

So they are all converging on that. That's number one.

But number two, we don't need to look at this data to know there is a rule. The delegates told us there was a rule. Or, I am sorry, a threshold, a target. It's stipulated.

So we don't need to look at the numbers. And the [840] movement, the relative movement of the numbers is irrelevant. Just like it was in *Page*, just like it was in *Alabama*.

JUDGE LEE: All right, final question, at least for right now, has to do with whether race predominated over the other factors in *Miller* that talks about the

racially neutral districting principles like compactness, contiguity, respect for political subdivisions or communities. There was testimony a lot of testimony about all those things from your experts as well as from Delegate Jones.

How are we to weigh all of that against race?

MR. HAMILTON: Well, I gather – the first question is, did they use a target criteria, whether roughly applied or strictly applied. And if they did, then I take that is the end of the analysis under *Alabama* because all these other factors – it's not inconsistent with race being the predominant factor. Of course there were other factors in drawing these districts, you couldn't draw them without taking into account other factors.

And that's why the Court has instructed this Court to look at predominance. And in *Page* this court held, and in *Alabama* the Supreme Court held when a court uses – when a legislature uses a flat rule, whether [841] it's – sorry a rule. Threshold, target, measured by the color of the voters' skin, that's predominance, especially when they list it in their criteria as controlling above all others.

And so, I think that's how you weigh it. Because you have to look at that. And we're fortunate here today because we have the Court's decision in *Alabama* which so clearly addresses this issue.

JUDGE LEE: Thank you.

JUDGE PAYNE: If that's predominance, Mr. Hamilton, then why did the Supreme Court in *Alabama* remand the case for further consideration in view of all of the evidence that then existed?

MR. HAMILTON: I can't remember – that's a good question, Your Honor. And I can't recall the specific

procedural posture, I apologize for that, but I believe that the court had misapplied the rule, and the Court – that is the rule of law. And the Court defined the rule and then sent it back down to allow the court in the first instance to apply the correct legal rule on the facts.

JUDGE PAYNE: But if the rule is that if you use 55 percent, which is your case, predominance is passed, then why would the Supreme Court ever have sent it back to Alabama to make a predominance analysis, is the question I was trying to ask?

[842] MR. HAMILTON: Fair enough. And I understood the question. But I think the answer is in that case they didn't use a 55 percent target. In that case it was, you know, how do we keep the majority-minority districts at or above 50 – their existing levels and not drop them? And the Court said, you asked the wrong question. Now go back on this legal standard, the correct legal standard, and either party, I believe they said at the end of the opinion, is free to introduce additional testimony under that legal standard.

JUDGE PAYNE: All right. You said that you do not believe and never would ask that this Court in resetting the district go below 50 percent.

So in your view, a 50 percent floor is sufficient under the evidence of this case and it's sufficient to use a 50 percent floor, is that correct?

MR. HAMILTON: Well, that's *Bartlett versus Strickland*, Your Honor. That's the definition of – Section 2 requires 50 percent plus one.

JUDGE PAYNE: I understand. That's your position though, right?

MR. HAMILTON: Well, of course, but that – yes, that's my position, Your Honor.

JUDGE PAYNE: Where between 50 and 55 percent is it permissible, in your judgment, to make a judgment for [843] any particular district?

MR. HAMILTON: What the Court has said, Your Honor, is that in drawing a district, a legislature, if it uses racial numbers, must have a good basis, strong basis in evidence for using that.

And the problem here is that the legislature didn't. The General Assembly used the same number across 12 very significantly different majority-minority districts.

JUDGE PAYNE: But that language comes not from the predominance inquiry in *Alabama*, but from a strict scrutiny and the narrow tailoring part of it.

MR. HAMILTON: Oh, I think it's in both, Your Honor. I think the Court looked at the use of a rough guideline both in the predominance analysis, and then it certainly did, as I think the Court just suggested, in the strict scrutiny analysis.

JUDGE PAYNE: One other question. The DLS – well, it is a related question. Would you put that table back up there that was just up there.

Where does that come from? It comes from Dr. Ansolabehere's report?

MR. HAMILTON: I'm sorry, this table here?

JUDGE LEE: Yes.

JUDGE PAYNE: All right. He has got black [844] voting-age population one place, and then Hispanic voting over in an entirely different category, yet he said the proper way to look at things was to consider

the black and Hispanic the same. Because if you answered black, you were in that category in the census data. And if you answered Hispanic and were also black, you were in that category.

MR. HAMILTON: If you - what he -

JUDGE PAYNE: How do harmonize that with this?

MR. HAMILTON: Yeah. The two columns in the center that we've been looking at, the black voting-age population, that's the census data. That is the same data that is reported by the DLS in Exhibit 47, Plaintiffs' Exhibit 47 to the Department of Justice for preclearance. That is all the people who answered the race question black. And by checking the box, total it up, that's what it is.

The Hispanic population in the other side is the ethnicity population. And that is the people who answered the Hispanic question.

There is no overlap between, those are two different questions on the census form, and they are displayed here in two different ways.

JUDGE PAYNE: Do you have any other questions?

JUDGE LEE: I have an additional question having [845] to do with the issue of race. And that is, is it your view that *Alabama Black Caucus or Miller* says that if race is a factor, that that would then mean that it violated the Fourteenth Amendment?

MR. HAMILTON: No.

JUDGE LEE: Or can race be considered?

MR. HAMILTON: Of course, yes, race can be considered.

JUDGE LEE: It can be considered. Then how do you get from race being a neutral consideration along with traditional districting principles to predominance here?

MR. HAMILTON: Here it's the use of a 55 percent, unvarying 55 percent racial threshold. It is admitted, it is stipulated that's what was used in 12 different districts. And it predominated against all the rest because – I mean, we can look at that. Just on the different voting behavior in each of the 12 different districts, it's uniform, it's applied across all of them.

JUDGE LEE: Well, do you think it came out of the clear blue sky that they came up with over 50 percent, or do you think that the prior benchmark population had anything to with it? The number. This is not *Shaw*

MR. HAMILTON: The 55 percent?

JUDGE LEE: Yes.

MR. HAMILTON: I don't think that the -

[846] JUDGE LEE: Let me start over. In *Shaw* there was a need to draw a new district after the Voting Rights Act. We're not dealing with that here.

We're dealing with existing districts that are majority-minority. Help me with your view of what action, if any, the legislature should have done in 71 where the population had gone down?

We had Delegate McClellan's testimony that she would have been elected with 46 percent, she says. And she would have.

But the question is whether there would be an issue here of dilution if there was not a chance – not a

determination to adjust population and it had to be done in 11 districts.

MR. HAMILTON: Of course they had to consider the population in order to comply with the one person/one vote principle. So in some districts that meant adding population. In some districts that meant taking population out.

They also had to comply with Section 2. So they needed to maintain the black voting-age population of at least 50 percent.

So they certainly, certainly needed to consider race, that's not a question. I think Mr. Braden and I are in agreement on that.

[847] Race cannot predominate though. When you say – moreover, it's not just 50 percent. It's 55 percent. And it doesn't matter what the differences are between any one of these districts, how they're performing, how much white crossover voting there is, it just matter, we're going to keep it all at 55 percent. That's just straight impermissible race predominance because you're subordinating everything else to race.

And it doesn't mean that they didn't consider other factors. Of course they did. But they subordinated in these 12 districts everything to at least maintaining 55 percent.

It's really not any different than in *Alabama* where they subordinated everything to maintaining the existing black voting-age population. It's not a one-way ratchet that never adjusts.

And it's not a magic number. The legislature doesn't have to be precise, but it has to have a strong basis in evidence for making the decisions that it makes. And it had no basis in evidence for adopting a uniform rule,

a uniform threshold, or target to all 12 districts. That's the opposite of having a strong basis in evidence. That is having no basis in evidence.

And going to the incumbents and saying, what do you need? What do you want? What would you like? What [848] do you need in order to be re-elected. That's not a strong basis. That's no evidence at all.

JUDGE PAYNE: I think Judge Keenan has another question.

JUDGE KEENAN: No, I'm fine. No, thank you.

JUDGE PAYNE: Do you have a particular articulation of how we would go about making a predominance finding?

If we don't accept your premise that merely using 55 percent gets you to a finding of predominance, what formulation could we use, in your judgment?

MR. HAMILTON: Well, I think that the best model and the most recent and applicable model is the majority opinion in the just rereleased Page decision, which looked at predominance by the use of a racial – ironically, the same redistricting, the same General Assembly, and same racial BVAP floor of 55 percent.

And there the Court looked at the use of the threshold, number one. But then, in addition, the circumstantial evidence.

I mean, I made much that this case – we sort of have a confession. You know, we don't need to look for the fingerprints. We don't need to look for the DNA evidence, all that sort of circumstantial stuff that you might otherwise look at.

[849] But here, we've got both, just like we did in *Page*. So you've got the use of the racial floor, coupled

with all of the analysis that we talked about. Gee, isn't it ironic that most of the least compact districts are all in these 12 districts. Isn't it ironic that most of the locality splits are in these districts. Isn't it ironic that if you look at the VTDs that were moved in and moved out, it's a funny thing, most of the African-American districts were moved in, the predominantly African-American districts, in order to concentrate – it was race that was the predictor of moving VTDs in or out. And that's Dr. Ansolabehere.

JUDGE PAYNE: We would follow the *Page* model, in your judgment?

MR. HAMILTON: That's what I would recommend, Your Honor.

JUDGE PAYNE: All right. Either one?

JUDGE LEE: No, I am done.

JUDGE PAYNE: Thank you all very much and I -

JUDGE LEE: Well, there is Mr. Braden.

JUDGE KEENAN: The defendants.

THE COURT: What?

JUDGE LEE: We will hear from Mr. Braden. Come up, Mr. Braden.

JUDGE PAYNE: Oh, we have questions –

[850] JUDGE KEENAN: Yes.

JUDGE PAYNE: Oh, I thought you meant you didn't have any questions for Mr. Braden.

JUDGE KEENAN: Oh, no, we're not letting him off that easy.

JUDGE PAYNE: Okay. He was ready to leave.

MR. HAMILTON: Thank you, Your Honor.

JUDGE KEENAN: Mr. Braden, is it correct then that your theory of the case is that the predominant consideration was incumbency protection?

MR. BRADEN: Well, I think you have to go district by district to know what the predominant consideration was in each district in each line, but certainly one of the predominant considerations, predominant over race, was incumbency.

JUDGE KEENAN: Was it your position that incumbency considerations predominated over racial considerations?

MR. BRADEN: Absolutely.

JUDGE KEENAN: Okay. Now, I'm concerned about the fact of how *Miller* defines traditional redistricting principles and whether your theory of the case might run afoul of *Miller*.

If you look at *Miller* on page 915, it talks about traditional race neutral districting principles.

[851] And so, my question for you is, if we have here a use of a 55 percent target for incumbency protection purposes or other traditional reasons, how can they be race neutral if you're injecting this 55 percent threshold even though they would otherwise be traditional considerations?

MR. BRADEN: Well, the state here adopted a series of very specific criteria. And among those criteria are a variety of ones I think that everyone would view as race neutral.

So the question really here is the transgression, by using race did you transgress – this is the language from the *Alabama* Court. In *Alabama* the case goes back and the Supreme Court on page 19 of its opinion basically says, well, the question here is, Alabama

possibly transgressed its own guidelines, it's very specific guidelines.

So the question here is, and I think a very specific question is, if you have these neutral guidelines, and I would suggest Roman numeral V-

JUDGE KEENAN: Right, but if race is the yardstick – I mean, if the target is 55 percent in each of these districts, how can it not predominate when *Miller* says that traditional race neutral principles are the ones that can predominate over race?

[852] MR. BRADEN: Predominate by definition I think requires it to be over something. To make something subordinate, make it less important.

So here, does race require the state to subordinate any of these criteria? Do we draw – do we divide up, as an example, do we divide up any community, any vote tabulation district, any precinct, did we cross any river to get race? And the answer to that is no.

JUDGE KEENAN: Okay. But what about the fact — what I'm really concerned about, among other things in this case, and perhaps you can address it, is 63 and 75. You have former Delegate Dance, now Senator Dance saying, I need 55 percent, my people don't all vote.

Okay. How is that race neutral?

MR. BRADEN: Do I believe that's race neutral?

JUDGE KEENAN: Yes.

MR. BRADEN: I absolutely don't think that's race neutral.

JUDGE KEENAN: Okay.

MR. BRADEN: She was absolutely considering race. But did that result in a district that violated the state's traditional redistricting criteria?

JUDGE KEENAN: Why does it have to be a violation? Because the next step is strict scrutiny. It doesn't get overturned automatically.

[853] Why doesn't it get you into strict scrutiny because the delegate said, my people don't vote, I've got to have 55 percent?

MR. BRADEN: You don't get to strict scrutiny unless you can point to somewhere where race required you to transgress the state's traditional criteria. It's not enough to consider race. Absolutely –

JUDGE KEENAN: Okay. Where in the case law does the Supreme Court say there has to be a violation of the traditional principle that race causes you to violate other traditional principles?

MR. BRADEN: I think that's the definition of the word "predominant," you have to subordinate. But I would suggest the *Alabama* case –

JUDGE KEENAN: Subordinate, you're saying subordinate and violate are the same things?

MR. BRADEN: Well, I would say the Supreme Court in its most recent opinion on this subject sends it back because of a transgression, a possible transgression of its own guidelines. That's what the Supreme Court says.

JUDGE KEENAN: But the Supreme Court was concerned in *Alabama* with the fact that they used equal population as a *c*alculus, weren't they?

And what they said is, equal population is a given. And you can't use these rough targets, you can't

[854] use these mechanically applied percentages. You have got to go back and review it because equal population is not even something that goes into the balancing test.

MR. BRADEN: Oh, I agree totally. I think the *Alabama* case is in fact principally a procedural case and an evidentiary case and doesn't change the underlying law.

But the language they use when they send it back to Alabama, they talk about Alabama transgressing its own state guidelines, its own state criteria.

If you look at *Shaw*, you look at *Cromartie*, it's all about drawing districts. Really the process here – if I could take a step back. The process here is geographic representation. And if a district exists as a geographic representational unit under the state's criteria, then it should be created whether or not race is a driving factor or not.

There is nothing – there is nothing necessarily wrong with drawing a line around a black neighborhood and making it a district if it is a geographic entity. And all of these meet those criteria. These all exist in reality.

JUDGE KEENAN: Okay. Now, if the Court were to disagree with you regarding any of these districts, for example, 63 and 75, where is the strong basis in evidence that 55 percent was necessary to preserve an opportunity [855] for election of a preferred minority – a candidate preferred by the minority?

MR. BRADEN: Well, we know for a fact that we're not –

JUDGE KEENAN: Do you have any straight – do you have any narrow tailoring evidence in your case at all?

MR. BRADEN: Oh, I believe the answer to that is for surely yes.

JUDGE KEENAN: Okay. With regard to 63, where is your narrow –

MR. BRADEN: My view is straightforward, that the actual members of the legislature, they are the most informed people –

JUDGE KEENAN: Where is your narrow tailoring, strong basis in evidence for District 63?

MR. BRADEN: I guess my answer to that is straightforward, the narrowly tailoring, I guess it's a – we have a disconnect. I don't think that narrowly tailoring is a number analysis.

Narrowly tailoring is how much that district violates the state's criteria. And we don't even have any evidence that it violates it whatsoever. We don't have a line anywhere, a VTD, a town, a river crossed that it shouldn't be.

If you don't – so if you have narrowly [856] tailored – narrowly tailored isn't driven at a magic number. It's driven how much you violate the state's criteria.

JUDGE PAYNE: Are you saying that political incumbency is a race neutral factor even if the political incumbent being protected is of a minority race and you are making the change to perpetuate that incumbent's seat?

MR. BRADEN: That is absolutely correct, Your Honor.

JUDGE PAYNE: And that is because that the real inquiry to be made is whether that decision, the decision to use race in connection with political incumbency, resulted in a district that offends all of the race neutral criteria?

MR. BRADEN: That's correct. The analysis is all about whether or not these districts meet the state's redistricting criteria.

In the end, it isn't so much about the number of African-Americans in the district or non-Hispanic whites. It's all about looking at the districts and saying, do they exist under the state's criteria.

And we haven't heard any evidence to blow these districts up on that basis. Or what we have heard, we have deep suspicions about.

JUDGE LEE: Can you pull back up that table [857] again, Table 4 from Dr. Ansolabehere's expert report. It is Exhibit 50, page 72.

Starting with District 63 that was raised by my colleague, the benchmark in that district was 58 percent, is that right?

MR. BRADEN: Yes, Your Honor.

JUDGE LEE: So it moved under the new plan 1.59 percent to 59.

MR. BRADEN: Yes, Your Honor.

JUDGE LEE: Not 55 percent, right?

MR. BRADEN: Yes.

JUDGE LEE: And if you look at District 75, the benchmark black population was 55.3, is that right?

MR. BRADEN: Yes, Your Honor.

JUDGE LEE: And under the new plan it's 55.4?

MR. BRADEN: Yes, Your Honor.

JUDGE LEE: 1 percent difference?

MR. BRADEN: One-tenth of a percent.

JUDGE LEE: One-tenth of a percent difference. Now, all these 11 of these districts had to be repopulated because they were all underpopulated, correct?

MR. BRADEN: Yes, in the end all the districts had to be changed.

JUDGE LEE: One of these delegates, I am not sure if it was Dance or not, said that when they were drawing [858] the lines, they wanted to make sure that they drew a line around a potential opponent's house.

Was that Dance?

MR. BRADEN: That was the Dance district, absolutely. That's the little finger, if you saw it sticking up, yes, out of the southern district. Drawn into Taylor's district.

JUDGE LEE: As it relates to the James River, House District 71, there was a river crossing there before. It was eliminated under HB 5005, is that right?

MR. BRADEN: That is correct, Your Honor.

JUDGE LEE: And the same is true down in Williamsburg where the James River crosses into Surry, that was eliminated as well?

MR. BRADEN: Yeah, we got rid of the ferrymander district, as it was described.

JUDGE LEE: And in HD 71 were you pointed out earlier, Henrico was removed from HD 71?

MR. BRADEN: That's correct, Your Honor.

JUDGE LEE: Trying to get Henrico back together?

MR. BRADEN: That's correct.

JUDGE LEE: Would that be contiguity?

MR. BRADEN: Yeah, that would be totally consistent with the criteria. It would make the district more in compliance with any types of — not just the [859] stated criteria of the state, which I think are the starting points, but clearly under any traditional analysis 71 is the district that should be there.

I mean, if we're going to draw some other type of district, then the blank community in downtown Richmond isn't going to get represented, let's not fool ourselves.

JUDGE LEE: What are we supposed to do with all this testimony about the number 55? How does that help me with processing that from the standpoint of predominance? Because if it is *Alabama Black Caucus*, then 55 is hard and fast rule and this plan has to go to strict scrutiny.

MR. BRADEN: A couple things from *Alabama*. One, *Alabama* talks specifically about a mechanical process. And we're talking about districts that are more than 70 percent black. And we're talking about districts that go from fairly compact to significantly ugly.

So we don't have a mechanical process here. Half the districts go up, half the districts go down. That's a classic random walk.

JUDGE KEENAN: Right. But aren't we talking here about legislative intent? You see, that's what has been

bothering me all along, whether race predominated in terms of the legislative intent.

I mean, I agree with you, there are all sorts of reasons why things were done, but doesn't it all come back [860] to proof of legislative intent and whether race predominated. I am feeding into Judge Lee's question on that.

MR. BRADEN: Absolutely there was an intent to draw majority-minority districts, and there was a goal to draw them around the 55 percent. There is no reason to beat around the bush, absolutely.

But the answer is, did that intent predominate over traditional redistricting criteria? This whole Shaw line of cases, I would suggest the Court should start its analysis by looking at the *Shaw* districts. This is all about creating districts that don't exist as geographic units, that don't exist under traditional redistricting criteria.

All 12 of these districts are the same 12 districts that had been around since 1991. The same 12 districts that were approved by the state Supreme Court ten years ago in that decision.

So I just don't see a conflict between these districts and any state policy whatsoever. The consideration of race, did it occur? Absolutely. Was there a goal, a hope, an aspiration, a rule of thumb? Absolutely. But just having that alone doesn't mean you transgress, to use the word from *Alabama*, that you transgressed anything.

[861] You've got to prove that we transgressed traditional criteria to get to strict scrutiny.

JUDGE PAYNE: Your basic argument on that point then is that from *Alabama* we are to rely on the

part that says the predominance question concerns which voters the legislature decides to choose, and specifically whether the legislature predominantly uses race as opposed to other traditional factors when doing so? That is, to choose to put districts – put them into different districts?

MR. BRADEN: That's correct. And I would also suggest the Court look at page number 18 where they are talking about the possibility that the state transgressed its own guidelines and the evidence of that.

And then *Hunt v. Cromartie* is abundantly clear on these issues too, it's predominance. And you can only – to be predominant, it has got to be predominant over something else, the predominance over traditional redistricting criteria.

JUDGE PAYNE: Excuse me. How do you get – what do we do with this discrepancy in the evidence between DLS – I think the vernacular has been DLS black and DOJ black. How do you suggest we can harmonize what we've heard on that topic from all these witnesses?

MR. BRADEN: Two things. One, if we're focused [862] on intent, I think the evidence is undisputed that the person drawing the plan thought these districts were, as far as he knew, less than 55 percent DOJ black numbers.

So if we're focused on intent, clearly the line drawer thought that at least three of these districts didn't have a 55 percent voting age-pop black as defined under DOJ.

Do I believe the difference between these two numbers is in reality meaningful in actual reality? No,

it isn't a significant difference one way or the other, let's be candid.

And also, just think about the process we're talking about. We're talking about redrawing lines now. These are all numbers from 2010. Do we think these numbers have any meaning as you sit there today as what these districts look like?

So this is – this fine distinction where we have to come up with a magic number between 50 plus one – 55 percent is too high, but we know we have to be above 50, so we have to hire a political scientist to come up with that magic number.

Which political scientist do we hire? Do we hire Dr. Katz? He is going to come up with a different number than theirs.

We don't want to be – think of how far this [863] pulls the Court into what you don't want to get into, which is this my minutia of racial fine-tuning. Surely the Court doesn't want to be trying to decide whether it should have 55 or 54 or 51 or 50.1.

JUDGE PAYNE: Thank you.

MR. BRADEN: That's a process for the legislature.

JUDGE PAYNE: All right. Judge Keenan would like to hear, and I would too, Mr. Hamilton, if you would respond to the question that comes from *Alabama* respecting the definition of the predominance question. Where the Court says – it begins in the paragraph – it's on page 1271. I don't know which you have.

MR. HAMILTON: I only have the slip opinion, Your Honor.

JUDGE PAYNE: It's right at the beginning of section Roman numeral IV. Go to the first full column, and there is a paragraph near the bottom that says, "But we have not listed equal population objectives." Do you see that?

Right below where they talk about the background factor.

MR. HAMILTON: Under Roman numeral IV that begins, "The District Court held in the alternative that the claims of racial gerrymandering must fail because race [864] was not the predominate" –

JUDGE PAYNE: Yes, that's the Roman numeral. Now go over two columns.

MR. HAMILTON: I'm in a slip opinion so I can't see where the columns are. Where the paragraph begins –

JUDGE PAYNE: "But we have not listed."

JUDGE KEENAN: That's on page 16, if that helps.

MR. HAMILTON: Do you have the slip opinion?

JUDGE PAYNE: Yeah, we have the slip opinion. Yeah, right there. Okay. All right, now go – have you found that paragraph, Mr. Hamilton?

MR. HAMILTON: I haven't. I have found the paragraphs start, in Section IV, it starts "The District Court held" –

JUDGE LEE: Page 16.

MR. BRADEN: I hate to do this, but I will be happy to help you.

JUDGE PAYNE: You should do it. And in fact, it's the way it's done with barristers in England.

MR. HAMILTON: The first paragraph begins, "The the District Court held in the alternative" –

JUDGE PAYNE: That's the first paragraph of Roman numeral IV. Go down about four paragraphs.

MR. HAMILTON: Four. "But we have not" – got it.

[865] JUDGE PAYNE: Now go on over to the continuation of that paragraph. "It is not about whether a legislature believes that the need for equal population takes ultimate priority. Rather, it is, as we said, whether the legislature placed race above traditional districting considerations in determining which persons were placed in appropriately apportioned districts. In other words, if the legislature must place 1,000 or so additional voters in a particular district in order to achieve an equal population goal, the predominance question concerns which voters the legislature decides to choose and specifically whether the legislature predominantly uses race as opposed to other traditional factors when doing so."

And my question was, how does he – is that what his argument was?

JUDGE KEENAN: And if I could just supplement that by saying, how does the existence of a 55 percent target even address the question of which voters the legislature was choosing unless you're solely relying on Dr. Ansolabehere's report?

I mean, is there any other evidence in your case that supports which voters the legislature was choosing?

MR. HAMILTON: If I understand the question –

JUDGE LEE: Recite it so we can make sure.

MR. HAMILTON: Wow, that's a task. I'm not sure [866] I can, Your Honor. The Court quoted –

JUDGE PAYNE: I guess the bottom line is, what proof do you have about which voters were placed where and why other than the fact that 55 percent was used?

That's what we're looking for an answer to.

MR. HAMILTON: I think I understand. The evidence is twofold. Number one, what did the legislature say it was doing? And what it said it was doing was adopting the 55 percent as a target or goal threshold for all of these majority-minority districts.

So number one is, they told us what they were doing. And in the redistricting criteria, they said that that predominates against everything. In the event of a conflict, this controls, this is the thing. Number one.

Number two, we can look at what they did. What they did is they moved some voters out, they moved some voters in, and then they swapped some voters between different districts. All with the goal, again, consistent with what they've told us, of maintaining 55 percent black voting-age population. And of course they were successful doing it.

So what they told us, what they did, and then the third piece of it is what did Dr. Ansolabehere say in his study. And his study looked at it several different ways. Looking at the border precincts. Okay, you have a [867] precinct that was in the old district and moved out, or not in the old district and moved in.

And what defines, what is it that better explains, was it politics or was it race, political performance or race that explained the movement of those VTDs?

So I think all three of those pieces of evidence line up and point to the same point, and prove the same thing as racial predominance.

JUDGE PAYNE: I think we would all like to thank the lawyers for the help you've given us. And thank in particular to the legal assistants without whose assistance we would not be where we are today. And we are very grateful for an excellent job. Thank you so much.

One request. And that is, you all have a bunch of boxes – just a minute, Mr. Troy. And I need, we all need some boxes to haul these things around. If you have got them out in the hall somewhere, let us have them so we can haul them.

Yes, Mr. Troy.

MR. TROY: Your Honor, may I inquire whether the Court in the posttrial briefing anticipates anything about the remedies?

I ask specifically because of the plaintiffs' briefing, anything to do with the upcoming November [868] election?

And on behalf of my defendants, there are matters going on daily already implementing that election. I did not know if the Court wanted to have that addressed or not addressed.

JUDGE PAYNE: We'll talk about that question and let you know by an order or a conference call.

MR. TROY: Thank you, Your Honor.

JUDGE PAYNE: All right.

MR. HAMILTON: Your Honor, apropos of our discussion just before the closing, can we leave the record open so that the parties can talk about which — not the record. Well, the record. So that we can talk about which exhibits are in and then read them into the record with the court reporter?

JUDGE PAYNE: Yes, you all are to do that.

JUDGE LEE: And let us know if there is any issue, we will come back if you need us.

MR. HAMILTON: Okay. I don't anticipate that, Your Honor. But thank you.

JUDGE LEE: I don't expect there will be.

NOTE: At this point a recess is taken; at the conclusion of which counsel appear in the absence of the Court as follows:

MR. HAMILTON: Okay. For the record, this is [869] Kevin Hamilton on behalf of the plaintiffs, and we're just going to read into the record the documents that have been admitted.

First, as listed in the stipulation regarding exhibits, which has been filed in docket number 87, Plaintiffs' Proposed Trial Exhibits 1 through 68 inclusive have all been offered and admitted.

And Defendant-Intervenors' Proposed Trial Exhibits 1 through 12, 14 through 16, 22, 28 through 34, 37 through 91, and 93 to 99 have all been admitted.

In addition, Intervenor-Defendants' Exhibit 92 has been admitted.

And Intervenor-Defendants' Exhibit 27, two pages of it, have been admitted. And those two pages have been placed in the clerk's file of original exhibits.

All other exhibits have either been not offered, offered but withdrawn, or offered and refused.

Do you want to say you agree?

MS. WALRATH: This is Jennifer Walrath, counsel for defendant-intervenors. And we concur with Mr.

Hamilton's reading of the exhibits that are in evidence.

NOTE: The case is concluded.

(End of proceedings.)

[870] I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter.

P. E. Peterson, RPR Date